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JAPAN REPORT

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MILITARY

OPTIMUM DEFENSE STRATEGY FOR JAPAN DISCUSSED

Tokyo VOICE in Japanese Sep 83 pp 64-81

[Article by Hisahiko Okazaki, Director of Research and Planning, Ministry of Foreign Affairs: "Basic Strategy for the Defense of Japan"]

[Text] I. Trend of World Strategy

To begin with, let's deal first with the problem of what the trend is in recent world strategic thinking, the most difficult problem to handle logically.

However, for those who are in a hurry for the conclusion, it's okay to skip this first section and read on. I intend to write so there is no obstacle to understanding the article overall if one were to read just the first paragraph of the second section.

On the other hand, for those who find my explanations adequate and want to get a deeper understanding of the original text-based discussions of world strategy, I will quote in the article the names of texts that will provide useful information.

In this age in which there is a flood of information, the question of what is the most important information is something of which I myself am always conscious: Among the limitless number of articles and books, which are the best to read? And in them, where is the good reading? Therefore, I hope that the way this article is written will be somewhat helpful to the reader.

Of course, the articles I will introduce are not a totally exhaustive list of ideas on recent world strategy. There is also no way to determine logically which articles should be read, because there would be as many different opinions as there are people.

Having said that, there is a way to solve this problem. It is a good idea to read at least those items whose failure to be read [would make it] impossible for one to follow a conversation with European and American policymakers, their principal opponents, and the groups which surround them (one can call them a "milieu"). That is, if Japanese intellectuals

and diplomats always have just such an intimate association with the leaders of the world's principal nations, [Japan] will not lose sight of the international situation. However, in a place like America, the groups are many complicated, and diversified, and there are instances where it is difficult to cover them all. Furthermore, since these groups are limited to only those people with whom I have been in contact personally, I think it is best to understand that the literature I will introduce here is also comprised of those items which, from a personal standpoint, had to be read during the past 2 or 3 years.

"Arms Which Can't Be Used, Anyway"

Western nuclear strategic theory has continued to be confused in recent years, but finally there is a feeling that some consistency has appeared.

Although it is said to be confused, the most superior strategy is that which has most accurately and keenly reflected the state of the military balance at various times. What is confused is the change in the military balance against which the strategy is set, rather than the strategy itself. Frankly, the absolute superiority of the United States in the balance of strategic nuclear capability between the United States and the Soviet Union, which existed in fact for 30 years after the war, has crumbled, and both have become nearly equal (parity).

Since there is no limit to how far one can look back upon this problems, let's think about the meaning of that while looking at the arguments over the past year on strategy.

In the spring issue of last year's (1982) FOREIGN AFFAIRS, a joint article by McNamara, Bundy, Kennan, and Smith came out with a proposal opposing America's using nuclear weapons first (no first use).

To state its contents briefly, the [possibility of] using nuclear weapons is actually disappearing, so [the article surmises that] it would probably be better to state flatly that [the United States] will not use them first.

This article has been received in Japan as if it were a part of the antinuclear peace movement, but in reality it is not. First of all, [the article is] just saying that "nuclear weapons will not be used first, but if they are used against us, we of course will use them." Put another way, nuclear weapons are indispensable as a deterrent against nuclear weapons, in order to prevent their use by the Soviets. It is clear, however, that even with these nuclear weapons as a deterrent against the enormous nuclear capability of the Soviet Union, much effort is needed in preparing nuclear military power in the future as well. Another point is that if it comes to no first use, we must be protected by conventional military power against conventional-military-power-based attacks with tanks, planes, etc. Since it is clear that Western conventional weapons on the European front are at present inferior, the conventional military capability must hereafter be strengthened. The main point of the article is that even if it costs much more money than has been used to date, this is still better

than the devastation of a nuclear war. In this sense, the article is a theory of military expansion. Furthermore, one must take into consideration the efforts of one's allies when it comes to increasing its conventional military capability. This, therefore, is one reason why the request made by doves in the United States today that Japan increase its defensive capability is so strong.

Why is it being said that strategic nuclear arms have become "arms which cannot be used, anyway?" That is because the United States and the Soviet Union have reached parity in strategic nuclear arms.

Since the time of the theory of mutually assured destruction [MAD], it was expected that nuclear arms could not be used. However, there is no literature even now which has given a clear explanation as to why things have come to the point where weapons cannot be used with the arrival of parity. That's because there is a taboo in this. There are many taboos in the arguments concerning Japan's defense, just as there are in the international discussions on strategy. The "need for U.S. superiority over the Soviet Union" is strategic nuclear arms, is a very difficult matter. It must inevitably be stated in some form or other that the reason for saying this is that "America is a good country and the Soviet Union an evil one; therefore, it is better that the good country be strong in order to keep world peace!" This is something that cannot be said to the Soviet Union in diplomatic circles.

However, there is much literature which does imply this. A speech by Kissinger on 1 September 1979 states that America was proud of its overwhelming superiority at the time of the Cuban missile crisis, and "when one thinks about how easy it was to decide policy then, one can be carried away by nostalgia." President Reagan in various speeches last year pointed out that it is historical fact that when American held overwhelming superiority, it did not attempt to start any wars and peace was preserved.

Also, when one extends the logic inherent in the idea of superiority in nuclear capability, one gets the idea of "winning a nuclear war." One of the things which is said to be characteristic of nuclear capability is the fact that that it is impossible [for one side] to knock down en route all the missiles that have been launched [by the other]. Therefore, "deterrence" is a term which is based on the threat that says if [they] strike, we will strike back. It is not the traditional idea of "defensive capability," which says not to take one step over the border.

Consequently, the term "winning a nuclear war" signifies the "immoral" concept of ultimately winning through the annihilation of the Soviet Union despite millions of deaths in New York and Los Angeles. Thus, since such a war cannot be waged in any case, logically both superiority and parity become, in the end, the same thing.

So why are things different with the arrival of parity? This is easier to explain when viewed from the Soviet standpoint. Once a war starts, it escalates little by little until finally there is a nuclear exchange.

As a result, each side continues to receive enormous destruction and the Soviet Union loses. In this scenario, the Soviet Union cannot wage a war. That was the essence of deterrence before parity. However, if as a result of war it came to an exchange, the Soviet side would naturally think it doubtful that America would be able to stop the Soviet advance even if America really pursued a course of mutual suicide.

In the same vein, Kissinger expressed similar doubts in answering a question on NHK during his visit to Japan in March of this year: "[I] do not know whether saying 'We'll commit suicide!' constitutes deterrence or not." Harvard's Huntington said the same thing when he stated that "Previously, peace depended upon the rationality of the side being deterred, but now it depends upon the irrationality of the side which is doing the deterring."

From the Soviet viewpoint, it previously was America's nuclear deterrence which deterred Soviet conduct that was rational, but now deterrence does not come about except in the possibility of irrationality.

With the situation being like it is, strategic theories that reflect it are coming forth, and they have caused consternation nowhere more than in Germany. The traditional German way of thinking is the typical MAD theory. If Soviet troops take one step into West Germany, war will immediately escalate into an all-out nuclear war. As a result, every German citizen and every American citizen will bear the same risk; hence, the formation of a alliance. Furthermore, because of this way of thinking, "warlessness" and detente have been the strategic theory, world view, and diplomatic policy of the Social Democratic Party for 13 years. However, not knowing whether America will commit "suicide" or not, and with the possibility that war could be put on only a European stage, the story is different.

In the Summer issue of FOREIGN AFFAIRS, a German contingent of four people--scholars and specialists--and an opposite group of four Americans expressed arguments that ran counter to the traditional theory of MAD. Because strategic theory, as has already been mentioned, is something that reflects reality rather than alters it, the military balance inevitably changes of its own accord. In Germany, the antinuclear movement gains strength, and even within the Social Democratic Party--which in the past petitioned the United States for deployment of INF--influence that is in alignment with the antinuclear movement is becoming strong. This could well become one cause of the end of the SDP's 13-year reign.

This no-first-use idea has a fatal shortcoming when it is taken as an actual strategy. At present, the West does not have the confidence that it could defend itself against a conventional Soviet attack unless it used nuclear weapons. Even if that led to mutual suicide, nuclear weapons might, by chance, be used. If there is even the slightest possibility of this the truth is that this would also constitute deterrence. So, ultimately, [this idea] doesn't receive the support of many specialists, and the West's public strategy has not changed. However, after this proposal was put forth, the general current of the specialists' thinking has moved in the direction whereby the barrier against the use of nuclear arms or

[nuclear threshold] would be raised by increasing conventional military capability, especially the development of precision weapons.

The supreme commander for NATO, Rogers, himself wrote an article in the same Summer issue which explained that the defense [of NATO] through conventional weapons would become possible if the funds that are committed by NATO members to the defense budget were raised by an actual 4 percent every year instead of the current 3 percent. The various NATO committees, at the end of the same year (1982), did not come to an agreement on a substantial increase in the defense budget's rate of increase, owing to the fact that several financial authorities were struggling with budgets in the red. On the subject of increasing conventional military capability, focusing on precision weapons, however, there seemed to be general agreement.

The significance of conventional power was logically reinforced from a different perspective by Howard's article in the Winter issue of FOREIGN AFFAIRS. In searching for the cause of the popularity of the European anti-war peace movement, Professor Howard of Oxford introduces the concept of "deterrence and reassurance." The first objective of strategy was, originally, to prevent enemy attacks--i.e., to deter. Not only that, the populace feels reassured that their safety is being protected.

The strategy must be one that is able to give this sense of reassurance. Essentially, if it is a strategy where the country is protected, the people should be reassured. [Howard] analyzes that the reason why these two [factors] do not go together anymore is because dependence upon nuclear strategy has increased. As strategic theory has become the playground of the nuclear strategists' logic, it has become divorced from the ordinary person. In addition, decisions of war and peace have been left in the hands of the American President, a foreigner. Therefore, the so-called notion of national defense, which constituted one of the sources of the traditional nation and society, has been lost to the people of the country. As a counter-measure, [Howard] advocates increasing conventional military capability and lessening the degree of dependence upon American nuclear deterrence, especially with the nuclear parity that presently exists between the United States and the Soviet Union.

Having read this article, I think that the Anglo-Saxon-type scholarly attitude is thoroughly eminent. [Howard says:] "Defenseive power essentially is something that is for the protection of the country, but if it becomes taken somewhat matter-of-factly when peace continues for a long time, it will, on the contrary, come to be regarded as a cause of war." And: "The Soviet threat and the nuclear threat have become two separate [notions], and it is only the threat of nuclear weapons that has, it seems, become strongly felt." The attitude that is revealed in statements such as these does not dismiss the kind of themes that Japan has been tired of hearing for the past 30 years as being the gibberish of antiwar advocates, but it directly analyzes [the problem] politically and sociologically and, moreover, it indicates concrete policies for their solution.

It is probably correct to say that there is a consensus in the academic world on the importance of conventional military capability. The (ESECS edition of) "The Strengthening of European Conventional Deterrence," which can be said to include most of the representative specialists in the United States and England, jointly advocates [the idea of] no early use, which is based upon the strengthening of conventional warpower.

From a Strategy of "Retaliation" to a Strategy of "Defense"

Let us for the moment get away from nuclear strategy and consider here the problems of diplomatic strategy--i.e., how to deal with the Soviet Union over the long term. I think it is safe to say that there is a consensus in Euro-American thinking on this subject also. An article by (Siara) in the Winter issue of FOREIGN AFFAIRS will provide useful information here.

As this article also recognizes, the experiment of the 1970's, which expected a Soviet metamorphosis because of detente, failed. The expectation that if East-West tensions were alleviated and Soviet vigilance eliminated, Soviet efforts at military expansion would also become relaxed, and that if East-West economic interchange flourished and that Soviet domestic standard of living improved, the people would want freedom and the system would become democratized, was totally betrayed throughout the 1970's.

The period of detente in the 1970's was precisely the time when the Soviet Union continued wholeheartedly with its large-scale military expansion and caught up to and surpassed the United States in many areas. Furthermore, it would not be an exaggeration to say that the general antisystem movement that had flourished since the time of Khrushchev was suppressed during the 1970's and almost eradicated.

On the other hand, it is being said lately that the Soviet economy will fail at any time now. There are some who have argued that, therefore, Soviet military expansion has peaked, that there is nothing to fear, and that there is no need for the West to get so worked up over opposing [the Soviets]. However, since no one today disputes the fact that the Soviet Union has the ability to continue with its military expansion efforts for another 10 or 20 years at the expense of improvements in the people's standard of living, these types of arguments are not current among specialists. Furthermore, the thinking which says that if the Soviet Union is in financial straits, it will in time suffocate and unavoidably see economic liberalization and compromise with the West as its means of escape, has come to be seen as something that cannot be expected for 10 or 20 years.

In this way, the consensus of specialists which has gradually taken hold is that a very long-term policy is required in dealing with the Soviet Union. It is recognized as a historical fact that neither the Nixon, Ford, and Carter administrations' policy of detente--which anticipated Soviet moderation--nor the economic embargo during the latter half of the Carter administration and the first half of the Reagan administration--which was to enable the United States to say, "Give up?"--went very well.

So, what is required with a long-term policy? Above all else, it is the maintenance of peace for the next 10 or 20 years. In order to do this, to borrow the expression of a certain German specialist, [mistakes of] both world wars must be avoided.

World War II, it can be said, occurred because England and France did not pay sufficient heed to Hitler's military expansion and because his willful acts, which were based upon military power, were acquiesced in, one after another. Extrapolating from this, it becomes apparent that we must endeavor to deter the possibility of World War III by being fully prepared against current Soviet military expansion, opposing [the Soviet Union] by strengthening the West's defensive capability and by severely remonstrating against such acts as the invasion of Afghanistan.

When one looks back on the causes of World War I, there was no one country that was especially evil. Despite that, Germany, which lost, was forced to accept very harsh surrender conditions, the unreasonableness of which was a remote cause of World War II. The reason why it happened, however, was because a sudden incident, which no one could have predicted, occurred on territory where the interests of the world powers were intertwined, and the Great War erupted without adequate communication between the great countries.

When one considers the examples of these two great wars, [it is clear that] first of all, the maintenance of sufficient deterrent power is needed in order to preserve peace. The strategic theory that is coming to be considered commonsense today says that that deterrence which attains both deterrence and reassurance depends not only upon the U.S. nuclear deterrent capability but also upon increasing conventional military power as much as possible in order to raise the nuclear threshold. We cannot forget the ironclad law that only power can restrain the Soviet Union's power-based actions.

Next, [what is necessary is] the enhancement of the international means of resolving disputes quickly and peacefully so that unforeseen situations do not escalate and develop into more violent confrontations. To do this, it is necessary to have adequate communication between the great nations concerned and an abundance of information on the situation in disputed territories, so that accurate judgments can always be rendered. It is also necessary to greatly promote arms reduction negotiations.

Arms reduction negotiations are, of course, beneficial from the standpoint of keeping down the danger of war due to excessive military competition, but at the same time they are necessary in order to achieve communication between the superpowers. Even if the superpowers mutually reduce arms, strategically there is no reason for them to comply with the arms reductions as long as they do not feel that their own country's safety is not being threatened. In the past, Japan had a 3 to 5 ratio in battleships vis-a-vis the United States and its situation was one of financial difficulty. But Japan calculated that for every 5 that crossed the Pacific and attacked in Japan's vicinity, they could adequately strike back with 3. In this way then, so-called arms reduction negotiations are a means for the mutual understanding of each other's strategy, meaning that the ability to predict how each would act in case of an emergency would increase.

It is also preferable to avoid unforeseen situations in lands wherein the influence of the superpowers does not extend. Having said that, however, [we are] talking of other people's countries, and there are limits to what can be done from the outside. Indirectly over the long term, however, something such as aid to developing countries will contribute to the economic and social growth of those countries and also will be effective in their stability. Arguments that say that the money used for aid to developing countries can take the place of funds used for self-defense are like saying "When the wind blows, the coopers profit." A direct link is impossible to make, but it is also not completely meaningless.

Finally, if the East-West relationship comes to be [regarded] as something that can be resolved only over a very long period of time, this is equivalent to, namely, the Khrushchev-declared peace competition. That is, deciding which of the two systems, socialist or democracy, is superior, would be carried out not by war but by peaceful competition. If it comes to that, then it will become a problem that concerns world economic policy in general: How is the economic stability and growth of each advanced democratic country and of their mutual relationship to be maintained in the future? In order for the world economy to circulate well, how is the North-South problem to be resolved? To go further, it also becomes a question of politics in general: How are people to be convinced that our democracy is not rotten or useless?

If the discussion comes to this, it is no longer possible for anyone to disagree; but to return once more to the East-West relationship, the problem becomes one of how long we must persist in this manner.

Frankly, this forecast is not at all predictable. What is understood is only that we probably cannot hope for any obvious change in a short, 10-year period of time. There is speculation about whether the Soviet economy will reach an impasse...or, because the increase in the population rate among the Moslems is larger, if a race problem will develop. It is predicted, however, that Soviet foreign and military policies will not be affected by these things for another 10 or 20 years yet. It is said only that "the Soviet Union today uses 15 percent of its GNP on armaments. If its economic growth is blunted, it will become an economy that devotes 20 percent of its GNP for armaments." Certainly, there is bound to be an effect on the government and society over the long term if the economy turns bad. However, I do not think that the [resulting] change would necessarily be limited to just democratization or liberalization. The idea that an oppressed people who can no longer tolerate their situation will rise up and bring to pass a free society is a Western European myth dating from the time of the French Revolution. But it is not necessarily so. Historically, and even in today's world, there are hundreds of countries whose economies are deadlocked and completely helpless, but the most common solution is a military junta. Actually, even the French Revolution itself floundered and ultimately became a military regime. A situation where the fruits of a revolution are seized by the military is exactly what is meant by Bonapartism. In fact, throughout Brezhnev's 18-year tenure, the voice of the military seemingly became stronger with each passing year.

Certainly, there is a sense that the future of communism has finally been reached, 70 years after the revolution. No one, including even the Soviets themselves, believes that the Soviet mode of economic management is able to achieve the highest productivity. Even the revolutionary movements of Central America, which seek liberation from the oppression of monopolistic capital and are receiving assistance from the Soviet Union and Cuba, do not think that. It can probably be said that no country--even the Soviet Union--any longer thinks that the ideology of Marxism-Leninism is the source of social dynamism.

However, although the possibility is not zero that such socialist systems will change and become free and democratic nations, it would probably be safer not to anticipate [such occurrences] during this century.

There is one thing that can be stated clearly, however. As long as there are no extraordinary situations such as war or a Great Depression--and even then, if they last for a short interval--the progressive democratic system to which we belong is the best system yet attained by man. And it is a system which possesses a vitality that will probably continue to survive for decades to come.

Therefore, there is no other way but for strategic policy to continue with perseverance for the next 10, 20, or 30 years to maintain a sufficient deterrent capability to prevent the outbreak of war while maintaining the prosperity of the advanced democratic countries and hope that something favorable occurs within that interval. Even if there are no hopeful developments, probably the best that the democratic economies can do is to continue to prevent war and survive--i.e., in addition to maintaining deterrence, to manage to carry on with the heretofore less than comfortable financial situation.

I think that something favorable will come about probably in the way of a technological innovation first, rather than by some change in the Eastern system which has been anticipated thus far.

The remote cause of the confusion that has developed in American strategic theory lies in the MAD theory. Postwar America has always been years ahead of and maintained superiority over the Soviet Union in nuclear weapons, hydrogen bombs, missile accuracy, and multiple-targeted missiles. The situation is one where parity has become somewhat acceptable because both sides will suffer "unbearable strikes" with this MAD theory, anyway. Also, no one doubted this theory when the United States held the advantage, but the present situation is one of worry, now that it is seen that [the U.S. advantage] has indeed been caught up with.

Reagan's speech on 23 March clearly moves in a direction which will turn away from the strategy of MAD. The strategy of "defense" and not of "retaliation" is something that moves away from the postwar concept of deterrence and returns to the traditional thinking of defensive capability. The idea upon which Reagan's thinking is based is Graham's "High Frontier." [The scenario] is to shoot down Soviet-launched ICBM's with non-nuclear

devices from a manmade satellite before they reach space when their speed is slow and, therefore, they are most easily targeted. "Then, nuclear missiles will have become passe. Long ago, castle walls were impregnable, and he who had the castle was lord. However, the cannon was then developed, and those who made castle walls became anachronisms. It will probably be the same with nuclear missiles." If it happens just as Graham stated at a press conference, then the U.S.-Soviet strategic environment will also undergo a complete transformation and, furthermore, a new world will quite likely come into being.

Aside from whether things will go according to Graham's theory, technological innovation, in any event, is something that depends greatly upon electronic technology. Although the Soviet Union launched a Sputnik before the United States, they have not yet sent a man to the moon. It is not because they did not have the desire to do so, but rather they just did not have the electronic technology. If the field of electronics becomes the main battleground of East-West competition, then it is almost a certainty that advanced democratic nations will win. America's intention to tighten its COCOM embargo, the great number of expulsions of Soviet technology spies by the advanced democratic countries beginning with France, and the importance that is attached to U.S.-Japan technological cooperation are all items born of the strategy of attaching great importance to technology.

The above-mentioned matter is only one of the possibilities. In any case, if only peace is somehow maintained, I think the East-West relationship over the long term can be looked upon optimistically and will have many favorable elements. This is because the West predominates economically, technologically, and, more fundamentally, in terms of its political system.

II. Strategy for Japan's Defense

To sum up what has been related above, there is no quick, "what-can-be-done-today" type of remedy for the East-West relationship at the center of today's international problems. But maybe we can anticipate that the situation will change for the better at some time if, over the next 10 or 20 years, we somehow stave off the threat of war and maintain the political, economic, and societal health of the advanced democratic nations. Finally, the importance that we attach to conventional military strength as a deterrent against war is rapidly increasing.

Within this trend of world strategy, what should the status of the strategy for Japan's defense be? First, in order to answer this, I would like to return to the principle which says that strategy is ultimately nothing but a reflection of the military balance and begin, therefore, with an investigation of the military balance with regard to Japan.

1. The Military Balance Around Japan

The military balance around Japan has in recent years changed to the extent that it can be said to be completely different. Kissinger speaks with nostalgia of the East-West balance during the Cuban missile crisis of 20 years

ago, but when I think about the Far East balance of just a few years ago and how comfortable it was for Japan, I can't be insensitive to [the difference between] today and yesterday.

Reading statistics on the Far East military balance is not as simple as it is with Europe. There were the two big wars, Korean and Vietnamese, and on each occasion the U.S. military strength in the Far East fluctuated wildly. For example, if figures for U.S. military strength in the Far East during the start of the 1970's were compared to those at the end of the 1970's and plotted on a graph, the trend that would unavoidably show "America's separation from Asia." Actually, the sense of crisis that was exclaimed about "America's separation from Asia" dates precisely from the time when the withdrawal of U.S. troops from Vietnam was completed, although there was a real problem at the time of the withdrawal of ground troops from Korea as well.

The Far East is different from Europe in other respects as well. There are also the problems of China's independent existence, the countries of North Korea and Vietnam, which, after the United States, China, and the Soviet Union, have large armies, and the fact that the U.S. military in the Pacific is being partitioned out to the Indian Ocean, where there have been disputes lately. The [statistical] comparison of the East-West military balance is far more complicated [for Asia] than for Europe, but let us for the moment put this problem aside. In looking at statistics for the balance in the Far East, it would be most realistic to regard the year 1976, when America's withdrawal from Vietnam was complete, as the base.

In the 7-year period between 1976 and now, the military balance for Japan has changed radically. Simply put, the reason is because America has become weak and the Soviet Union strong.

To say that America has become weak is misleading. Up to 1976, America's influence--army, navy, and air force--had been sinking but since 1976 America's strength has been at about the same level in terms of numbers. And because material renovations have been made along with the passage of time, the absolute value of its fighting potential has, if anything, improved year by year.

Nevertheless, saying that they have become weak is something that is based chiefly upon the international state of affairs.

Up until the downfall of the Shah in 1979, there had been almost no need for America itself to use its military power in defense of the Persian Gulf, which is of vital importance to the survival of the free world. The so-called two great powers of the Gulf, Iran and Saudi [Arabia], were essentially U.S. allies. By maintaining diplomatic relations with these two countries, the United States was able practically to guarantee the safety of the Gulf with only military assistance. However, even though the Iranian regime may not be neocommunist after the collapse of the Shah, there is no doubt that it is anti-American. Furthermore, the

Soviet Union's invasion of Afghanistan occurred at a time when the stability of the current regime was in doubt, and its influence is now moving south toward the Indian Ocean. Opposite this situation is the fact that the NATO countries as well as Japan are unreliable when it comes to preparing for that one-in-a-thousand incident and in protecting the Persian Gulf, so the power of the U.S. military itself must be used. The concept of a so-called Rapid Deployment Force is for just that purpose. Stated simply, it is a plan to throw into the Gulf a large portion of [U.S.] military strength that can be used dynamically, such as airborne troops, amphibious forces, carrier-based mobile forces, tactical aircraft, etc.

Taking the carrier-based mobile forces for the moment, although there are only seven mobile forces available to cover the Pacific Ocean (six, if one carrier is always under repair or overhaul), they are deployed in the Indian Ocean as well. Furthermore, the Soviet Union has been using Cam Ranh and Danang since 1979. Consequently, if it becomes necessary to counter these [forces] as well, the number of forces that can be allotted to the area around Japan, will be cut by almost half, compared to the 1976 era.

During the Korean War, the army was sent directly from America in several divisions, but today it couldn't be done like that, with the increased number of Soviet submarines, Backfire [bombers] flying about, and the limitations on the fighting strength of escorts. Also, the airborne troops are prized for use in the Persian Gulf and probably can't be used in the Far East.

Rather than say that America has become weak, it is a fact that America's responsibilities have suddenly increased and the military strength available for deployment in the Japan theater has diminished. Behind this is also the fact that the Soviets' ability to reach various parts of the world has increased dramatically.

Using as the basis [for comparison] the same year 1976, the increase in Soviet military strength in the Far East since that year has been astonishing. The Pacific Fleet has increased from approximately 1.3 million tons to 1.6 million tons. A 300,000 ton increase [doesn't sound like much] in words, but in is a frightening increase when one considers that Japan's self-defense fleet is about 200,000 tons and the U.S. Seventh Fleet, which patrols the western Pacific and Indian Oceans, is approximately 600,000 tons.

Long ago when the Baltic Fleet, which encompassed the entire naval strength of European Russia, headed for Japan, it was felt that Japan's fate was sealed. Altogether it was 300,000 tons, and half of that was made up of coal ships. After that, the size of battleships increased to that of the Misashi and Yamato. Since they have been getting smaller again since the war, however, it is probably okay in general to imagine the Baltic Fleet of that era.

America has the Third Fleet as a backup in the eastern Pacific, so it can't be said that the Soviet Union has already gained the advantage in the Pacific and Indian Oceans. During this time, however, Soviet naval air forces in the Far East have also been radically strengthened. Therefore, I think it can be said that the Soviet Union has the advantage along the Pacific coast, where it can use its land-based airbases in the Far East, and that the United States with its carrier-based mobile forces, has the edge in the middle of the Pacific. I think it is plain for everyone to see that with the situation as it is, the degree of potential danger to the searoutes in the area around Japan has increased dramatically in comparison to 1976.

Since Japan is an island country, the army balance is restricted by the attacker's ability to land. There is a big difference in this regard between the military balance here and that on the NATO front, which is confronted by 100 or more divisions of Warsaw Pact troops. However, [the Soviet] assault-landing potential has also been increasing lately. It has been confirmed that the assault-landing ship Ivan (Logov) has been deployed to the Far East and that, furthermore, an elite division of naval infantry has been deployed close to Valdivostok. Therefore, the landing potential [of the Soviets] probably eclipses the estimated figures for 1976 by a great deal.

Ultimately, however, the potential for a landing is influenced by the ability to command the air, and the air force balance has clearly deteriorated. Air strength does not have much meaning in terms of a quantitative comparison. Although it is quite costly to make the changeover from old to new model aircraft and, moreover, their numbers may be reduced [in the process], modernization is more important. In the Soviets' case, it is quite astonishing that during the early 1980's the numbers are also gradually increasing while they radically modernize.

It is difficult to talk concretely about comparative air strength. For example, when we look at the radius of operation for planes fighting at low altitudes, the chief strength of the Soviet Air Force was the MiG 21, which at most could only control the air over the vicinity of Hokkaido's northern edge. Now, the fighting capability has steadily improved and the chief strength has become the MiG 23, 27, and SU-24, which can dominate a wide area over northern Japan proper. This change, moreover, can be said to have occurred within only a 2- or 3-year period around 1980.

Described above is the change in the military balance, but the international political environment has also undergone a great transformation. Up until the mid-1970's, according to Soviet remarks, the biggest threat in the Far East was China. Japan was practically no problem at all. In fact, it would not be an exaggeration to say that the bulk of the increase in Soviet conventional military strength was concentrated on the Sino-Soviet border. Although they knew about this Soviet tendency for military expansion, it was a period when both Western Europe and Japan escaped without feeling the pressure of increased Soviet military power. In the background of this was the power relationship between the United States

and the Soviet Union during the period of detente in the early 1970's. Once the deployment [of forces] along the Sino-Soviet border was temporarily settled during the mid-1970's, increases in Soviet military strength began to be directed at NATO, the Pacific coast, America, and the Middle and Near East.

Then during the latter part of the 1970's, when Sino-Japanese and Sino-American relations improved, the Soviets began to make remarks criticizing Sino-American-Japanese cooperation as being a threat to the Far East. Against Japan especially, the Soviet Union made a display of its power by deploying ground troops in the Northern Territories and by having the Minsk groups sail during the Tokyo Summit. Then recently, as Sino-Soviet relations started to improve, Soviet criticism of China was dropped and more emphasis was placed upon criticism of the United States and Japan.

2. The Possibility of War

Up to this point, we have explained to what degree the political and military balance for Japan has deteriorated. Ordinary people, however, doubt whether this should be of major concern if war is not what necessarily will result, even with a slightly weakened balance. Is it really possible that Japan will become involved in war? If so, the problem becomes what kind of war? Japanese strategy must be generated from those [questions].

If one thinks only about the defense of Japan without considering the international situation, one gets--as an extreme example--a scenario in which the protection of Japan is nothing at all if the six U.S. mobile forces in the Pacific are gathered all around Japan and the army's Second Division is brought from Korea. The opposite scenario is that because the entire Soviet army of 180 division, navy of 5 million tons, 8,000 tactical vehicles, and 1,400 ICBM's would all be brought in opposition, we would be no match for them from the outset and therefore, it would be better to give up. In other words, there is an interpretation of the situation, a scenario, and then strategy is something that emerges.

Ultimately, as long as there is the [U.S.-Japan] Security Treaty, Japan will not get dragged into local disputes. Among the world scenarios, there is the possibility that a cause for war would be the threat that U.S. bases on Japan would not be able to be used if there were an incident in the Far East--say, a Sino-Soviet war or something on the Korean peninsula. The threat would be meaningless, however, if it were not credible. Something such as a blockade or a bombing of Japan would constitute a credible threat and would be met with American resistance as long as there is the Security Treaty. Since a war between the United States and any country would be a life-and-death matter, it is not something that would readily come about. Consequently, it is said that if Japan were to be on the brink of war, it would be because a U.S.-Soviet war had already begun somewhere in the world or because such a war will have been judged to be unavoidable.

Therefore, the question is whether war is something that could really happen. This is already a philosophical question, to which the answer is: Hasn't humanity by this time matured to the point that foolish conduct such as a war is not carried out? In the case of both the Korean and Falkland wars, both sides just wasted many lives and a lot of money and acquired nothing in comparison to [the situation] before the wars started. Loss of life is something that is difficult to endure for the individual and his family. If it is true that "war is difficult to endure, and therefore a stupid thing such as a war is not waged," then one would expect there would have been almost no wars in the history of mankind.

In thinking about the difference between now and the past, there is one difference. The possibility of an all-out nuclear war is stronger and "the foolish act of war" is being restrained. This will remain partially true in the future as well. However, as was explained in detail in Section I, the trend of strategic theory in the world is increasingly coming to regard nuclear weapons as "weapons that can't be used anyway" and hypothesizing that war will involve only conventional weapons.

The notion of "an all-out U.S.-Soviet war involving conventional weapons" has been explained in detail before (Bungeishunju series entitled "What Is Wartime Thinking?" to be published as a book by Chuokoron under the same title, so I won't go into it here. However, the scenario that is predicted as being the most likely is as follows:

The scenario supposes that in some remote corner of the world a situation occurs that could not have been predicted or controlled by either the United States or the Soviet Union--such as an assassination or a coup d'etat. It doesn't have to be restricted necessarily to an out-of-the-way place where U.S. and Soviet interests are not involved. Although they occurred within the East European Bloc, both the Prague Spring and Poland's Solidarity movement originated from areas within the societies of these respective countries where Soviet control was not effective. The fluctuations in the internal politics of the Middle and Near Eastern oil-producing countries are regarded as the most dangerous. They could gradually escalate to the point where it would become necessary for either side to introduce military force or to intervene with the threat of military force. In reaction to this, each side warns the other--under the external and internal political circumstances, the mutual warnings must be done credibly--or the situation will develop into a problem involving actual interests. Thus, war begins, but both sides are cautious lest it escalate into a nuclear war and, while engaging in war on the one hand they seek a point of compromise on the other. As conventional war expands quantitatively and geographically in this way, the matter will be temporarily settled in some manner. From this point on, the situation stands at the crossroads between escalation into nuclear war or a cease-fire. Although this may be somewhat optimistic, it is thought that ultimately the fighting will end in some kind of working agreement.

Although it might not be an all-out nuclear war, such a war between the United States and the Soviet Union would be real and send sparks flying

throughout the world. Whether Japan would be drawn into it or not would depend upon, first, Japan's strategic value and, second, the level of Japan's defensive capability.

At the time of a real confrontation between the superpowers, small and intermediate nations' being neutral or not carrying out any provocative acts would be small factors that would constitute practically no problem at all in comparison to the two above-mentioned conditions. During World War II, Belgium, Denmark, Finland, and Norway were unable to remain neutral, while Sweden and Switzerland could. The determining factor is the arbitrary conduct of the superpowers rather than the attitudes of the weak ones. Moreover, if preparing for war is in itself considered "provocative," then Switzerland and Sweden were the ones who were "provocative."

Since war would be a life-and-death matter for the superpowers, if there is any place of which the enemy can possibly make strategic use, it would be beneficial to take it before the enemy does. It would be stranger still if countries that are lightly armed or without allies they can call upon, such as Belgium and Denmark, were not grabbed--no matter how much they proclaimed their neutrality. In fact, if World War II had become a stalemate between the Maginot and Siegfried Lines, as happened in World War I, the strategic shortcut for England and France in attacking Germany would have been via Denmark. If that were the case, it would have been safer for Germany to take Denmark, no matter how unprovocative Denmark's speech and conduct.

I won't go into another detailed explanation here about Japan's strategic position. But the probability is very high that Japan, with its strategic position vis-a-vis a Soviet Pacific advance, would be pulled into war. Before the Russo-Japanese War, when Japan was contending with Imperial Russia, which was said to be the most powerful country in the world at that time, the Meiji elders debated zealously, and as a result Japan plunged boldly into an alliance with England just because of this geographical situation.

Among the two conditions--strategic value and defensive capability--that will decide whether or not a small country becomes involved in war, it is strategic value that cannot be helped. But Japan can continue to cooperate with America in order to improve its defensive capability. According to Churchill's memoirs, there was the possibility that Belgium also could have been adequately protected from a German attack during World War II if they allied themselves with England and France and had constructed encampments on the border. However, in order to maintain its national policy of neutrality, Belgium could not seek the help of England and France until German troops crossed the border. Under these circumstances, there was nothing that could have been done.

3. Japan's Strategy

Up to this point the strategic state of affairs in the world is understood. If the changes in the military balance with regard to Japan and various

scenarios are also understood, the strategy for Japan--[the answers to the questions:] How can Japan manage to not get involved in the fighting? And if it unfortunately does get involved, how does it minimize it?--will unfold.

It is clear, first of all, that Japan is one of the advanced democratic nations. The war wherein there is the greatest probability that Japan would become involved is an all-out U.S.-Soviet war. If the Western European NATO countries were also automatically to become involved, the best that Japan could hope for as an end to the war would be a victory by the advanced democratic countries and a return, more or less, to things as they are now. Nobody is likely to disagree with the fact that, as far as Japan is concerned, the political and economic makeup of the world as it is now is the most comfortable.

It is natural, therefore, for Japan's strategy to be to consult and act in concert with the advanced democratic countries, especially the United States.

It is natural for each country to cooperate in such a way as to maximize the benefits common to their respective alliances and, at the same time within that framework, to maximize the security of their own country's citizens. Each country also has the obligation to its people to minimize the damage to its territory.

The most desirable thing for the Japanese people is for any damage inflicted upon Japan throughout the time of war to be minimized. This does not mean, however, that Japan will be able to have nothing to do with war. As was already mentioned, whether small and intermediate nations can remain neutral or not is something that is determined by the strategic calculations of the superpowers, and not by the small and intermediate nations themselves.

If a U.S.-Soviet war were to begin, the situation in the Japan theater would always be touch-and-go. There also would probably be fighting over sealanes and limited and local confrontations. If the situation could remain such that the war would end without its being a large-scale affair--i.e., that the principal battles would take place outside of Japan and that the Japan theater would remain in a state of watchful opposition, this could be called the best of all predicted scenarios in a U.S.-Soviet war.

One scenario that is near fantasy is Japan's becoming a military superpower which could control the military balance in the Far East. That is, if Japan had the kind of power that could decide the outcome of battle in the Far East were it to participate in war, then an attacker which thoughtlessly tried to take advantage of Japan's strategic value would anger Japan, bring it into war, and result in much damage. Japan would become a nation which says: "I am a peace-loving country, but if you try anything, you'll suffer the consequences!" It is similar to the argument which was current before the Pacific War and which urged that Japan attack only England and Holland and not America.

This is a dream, considering Japan's military capability today, but there is a way to minimize the possibility of war without going that far.

The first condition in a worldwide war is that the Far East would likely be the secondary rather than the primary front.

The NATO front, which possesses most of the advanced democratic countries, and the Persian Gulf, which controls the world's energy sources, are the principal areas of life-and-death importance to both the Eastern and Western camps. Compared to these areas, the Far East is a secondary war front.

As to whether a second battle front opens or not, that will be decided by how profitable the military operations on the main front are. This would always be a difficult choice for the superpowers involved. Depending on the situation, it is a choice that carries with it the possibility of leading to a fatal blunder, such as Germany's attack on the Soviet Union. The main front is a life-and-death matter, so both powers will concentrate as much power as they can there. But the second battlefield is a matter of choice, so the principle of cost effectiveness will apply.

That is, if the strategic benefits to be gained are not worth the sacrifices to be made, there is a possibility that a second front would not open. Thus, it would be good if we had the ability to defend Japan or Hokkaido completely or were able to stop an attack upon Japan at our shores. On the other hand, even if we couldn't do that and the attacker were able to attain its objectives, it would be good if we had the ability to make the attacker pay dearly for those objectives. If [the attacker] thought that the sacrifices would be so excessive as to detract from its strategic power on the main front, then no second front would be opened from the start.

Also, irrespective of primary or secondary fronts, if there is a front somewhere that is especially weak in comparison to other fronts, then quite naturally there is a possibility that fighting would begin there. From the standpoint of the advanced democratic nations' common strategy to persist somehow in preventing the outbreak of war for the next 10 or 20 years, there is also the international obligation that the Japan theater not become especially fragile. On the contrary, if the power of resistance in the Japan theater were to become stronger than that on other fronts, the possibility that real fighting would take place in the Japan theater would be extremely low. If it came to that, more emphasis would most likely be placed upon the offense and defense of the sealanes. Of course, reserves and equipment for maritime self-defense capability would be needed to do this, but I think that just Japan's being able to avoid the tragedy of becoming a battleground would be a great thing.

In short, in the event of a worldwide war, it would be virtually impossible for Japan to have nothing to do with it, when viewed from the perspective of Japan's strategic environment.

Furthermore, if we were to divorce ourselves from the joint efforts of [the democratic nations] in protecting the common interests of the free world, American public opinion would be aroused and its commitment lost. In this event, rather than avoiding war, on the contrary only the possibility of becoming involved in one would not be eliminated altogether.

The most important thing for Japan is not the avoidance of facing war directly; I think it is constructing the type of defense system where, while Japan faces war, the Far East battle line remains, if possible, in a condition of watchful opposition and Japan can wait for the war to end without any active fighting on Japanese territory.

4. System for Japan's Defense

It would probably be all right to end this article at this juncture. Supposing that the analysis and the strategy arising therefrom are correct, it would be all right to leave the matter to the specialists and those responsible for policy. In order to bring air and naval strength, whose balance has crumbled in the past several years, back up to its previous comfortable position, questions such as how many ships and planes should be built, show the deficiencies in ammunition and fuel reserves should be made up, and what domestic laws there should be so that fighting can be carried out effectively when there is an incident should be considered by the respective specialists, in close consultation with the United States.

I would just like to point out three things here.

The first concerns providing the necessary defensive capability in order to achieve the strategic goals described above. Even within the various restrictions in force today--such as those prescribed by the Constitution and the three antinuclear principles, there is enough room [to carry this out]. Financially as well--current financial shortcomings caused by other reasons aside--no radical changes in fiscal policy, such as large tax increases, will be necessary.

As mentioned already, that so-called comfortable situation actually existed in 1976, only 7 years ago. Since it is something that deteriorated in just a 7-year span, recovering it in the future with a few years of effort is a realistic goal.

The reason for that, above all else, is because Japan is an island country. The NATO front, which has been facing 100 divisions of Soviet troops for the past 30 years, and whose premise it has become that it cannot be protected without the use of nuclear weapons, is radically different. Take air defense, for example--aside from places which are close [to the Soviet Union], like Hokkaido: It is possible to spot [airplanes] by radar while they are crossing the ocean; also, a deficiency in the number of planes can be made up for in part by surface-to-air missiles. In addition, both the United States and Japan are wealthy nations, so they can make substantial improvements by just devoting to defensive capabilities a budget that can be controlled by government policy decisions.

The second point is the matter of the intermediate-range nuclear force (INF), which is becoming a problem today.

The reason why I did not venture into this matter more deeply in this article is because at the present time both the Japanese and U.S. governments agree that control of the INF [as to its deployment and use] not only is a matter that pertains to Europe, but is a matter of global concern that includes Asia as well. And that is the only problem at the present time.

As was the theme of Schmidt's speech given at Britain's Institute for Strategic Studies in 1977, the problem of the theater for nuclear war must be taken as part of Soviet-American global strategy. That is, for Japan, deterrence against nuclear weapons--SS-20's, for example--exists under the U.S. nuclear umbrella, and control of such armaments counts on U.S.-Soviet negotiations.

For that purpose also, the most important thing for Japan is to augment its supply of conventional weapons. Unlike the situation in Europe, in the Japan theater there has been no nuclear strategy for protection from conventional attacks upon Japan during the 30-year postwar period. The important thing for the strategy of Japan is that it not create a dangerous strategic balance in the Japan theater such as would result by saying that Japan cannot adequately be protected without using or threatening to use nuclear weapons. Certainly, the balance in the Japan theater is becoming perilous, but even now there is no change in the strategy of the United States and Japan, which says we should somehow extract ourselves [from this perilous situation] by building up the conventional arsenal.

If Japan becomes lax in this effort and its defense begins to depend upon nuclear tactics, of course, the danger of escalation will draw near and the threat of SS-20's will not simply remain a global, political, or psychological threat. It will become a real threat.

To sum up, the best policy for Japan in opposing the SS-20's is to build up its conventional arsenal and to increase the dependability of America's nuclear umbrella by strengthening its relationship with the United States.

Finally, in connection with this, I want to emphasize once again the importance of U.S.-Japanese ties. No matter how much we do not want the Japan theater's defense to be weaker than that of other places, ultimately this is not something that can be accomplished only by the efforts of Japan. The strength is a strength born of cooperation with America. To carry it to an extreme, it can be said that whether the [defensive walls] around Japan grow thicker or thinner depends on the feelings of America. Not just the feelings of some one individual, but, because America from its inception has been a democratic country, what both public opinion and Congress think about Japan.

In debates on the strengthening of [Japan's] defensive capability, one often hears the expression: "I am opposed to very much of an increase, but to please America it can't be helped." One senses a kind of irresponsible attitude, as if one will not try to think about what is needed for Japan's defense by oneself. On second glance, however, it is a way of thinking which is sound and understands the broad strategy of Japanese diplomacy. It understands that ultimately, without America's cooperation there is no security for Japan, and that, furthermore, the ultimate way to ensure American cooperation is to make sure that the attitude of the American public and Congress toward Japan is favorable.

The security of the Far East rests on the trust between the United States and Japan and will continue to be maintained by joint American-Japanese efforts. If [both countries] work to stabilize this region in this way, it will not become a weak link from the standpoint of world strategy. Then, if peace is maintained in this fashion for 10 or 20 years, the age of crisis in the advanced democratic society will be safely overcome, somehow. This will be the basis for Japan's strategy.

(The above are the personal opinions of Mr Okazaki and do not represent the views of the government)

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MILITARY

JSP REPORTS PROBLEMS OF MILITARY EXPENSE INCREASE

Tokyo SHAKAITO in Japanese Oct 83 pp 49-59

[Article by Osamu Yatabe, member of House of Councillors]

[Text] 1. Increase in Military Expense

(1) 3-Year Continued Increase

In the FY1983 budget, the government/LDP kept the increase in operating expenses to zero but allowed an increase of 6.5 percent in military expenditures. The increase is bigger in the estimated budget request for FY1984 and although, as a principle, a ceiling requiring a 10 percent decrease was placed, the military budget, after a series of unusual cabinet negotiations, was raised by 189.5 billion yen, or 6.8 percent, over the previous year. It has become apparent that the government policy is to increase the military budget for 3 consecutive years.

In the government budgets of the 1970's, it was considered normal for increases in social security, education and public works budgets to exceed the rise in the military budget. There was a big change in 1980. Increases in public works and education budgets were less than that of the military budget and since 1981, the increase in social security expenses has also become smaller. Then, in FY1983, while there was no increase in all three of these main items, military expenditures alone continue to increase within a special framework, and next year's budget will widen the gap between the two categories, with military expense continuing to be treated as an inviolate entity. (See Figure 1.)

This is the true picture of the administrative reform, "reduce welfare benefits to expand the military," advocated by Doko [Toshio, chairman of the Temporary Administrative Reform Investigation Committee] and Prime Minister Nakasone. Moreover, this is not simply a budget problem. With respect to the number of government employees, since the 1968 first-phase personnel reduction program up until 1982, a total of 10,508 workers, mostly in operationally active sectors, were discharged but during the same period, self-defense officers were increased by 21,790. Furthermore, the second-phase temporary administrative reform calls for "a reduction of over 10 percent of general employees in the next 5 years." But in the 2 defense laws,

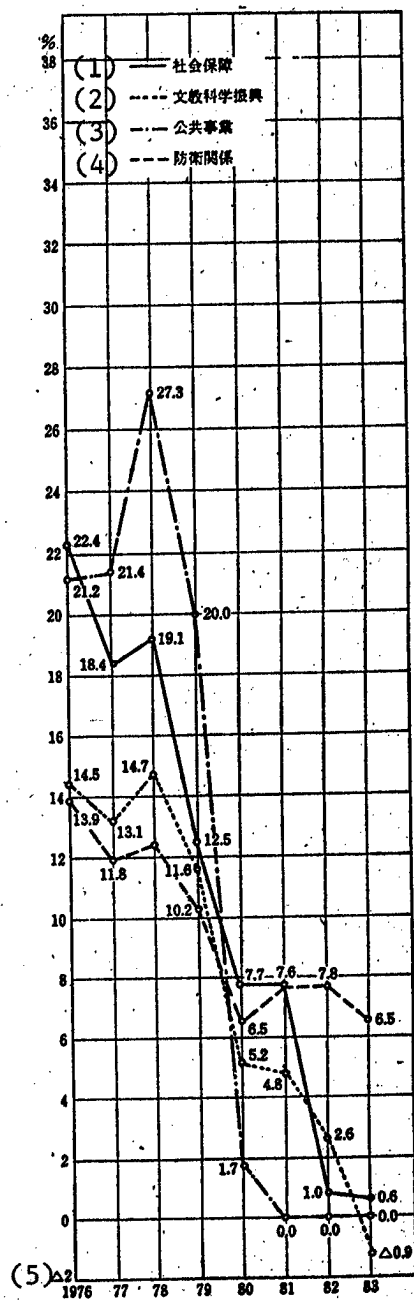


Figure 1. Comparison of Percentage Increase Over the Previous Year of Main Items in General Account Expenditures (Initial Budget)

Key:

1. Social security
2. Promotion of science and education
3. Public works
4. Defense-related
5. Δ = minus

currently under Diet deliberation, the government is planning to add about 2,000 officers, mainly in the Maritime and Air Self-Defense Forces. The substance of Nakasone's administrative reform, i.e., "a small government and a large military force," is being conspicuously exposed.

In that sense, Doko's Temporary Administrative Reform Investigation Committee is paving the way for military expansion and the risk is increasing that using it as a guide, Nakasone's administrative reform will solidify the strategy for 1980's toward constitutional revision and military expansion. On that score, approval of "administrative reform" and opposition to military expansion constitute a schizophrenic antithesis and both must be denounced in the same vein.

(2) Leading the World in Increase

In recent years, the world's military expenditures have rapidly ballooned, while suppressing welfare expenses, and have reached \$600 billion annually. Comparison of military expense increases of major countries and military blocs of the past 10 years reveals that Japan leads the world.

The speed with which Japan outpaced not only the USSR and Warsaw Pact countries but the major NATO countries in military expense increases from 1972 to 1981 is clearly shown in Figure 2.

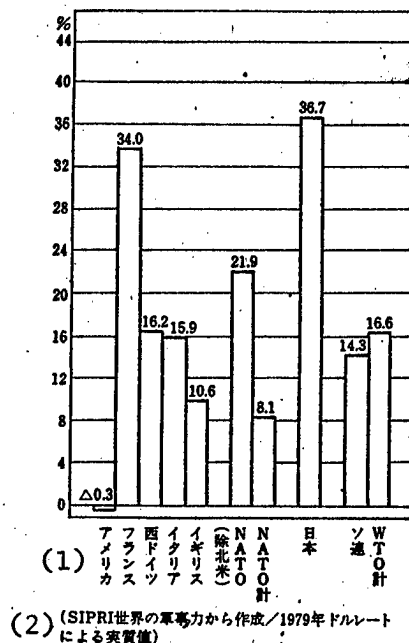


Figure 2. Comparison of Military Expense Increases (Percentage)--1981 Over 1972

Key:

1. (Left to right) U.S. (decrease, 0.3 percent); France (increase, 34.0); FRG (16.2); Italy (15.9); UK (10.6); NATO (without U.S., 21.9); NATO (total, 8.1); Japan (36.7); USSR (14.3); WTO (total, 16.6)
2. (Compiled from SIPRI World Armaments & Disarmaments: SIPRI Year-book, 1979/actual value based on 1979 dollar exchange rate)

In spite of the foregoing, European nations and the United States are criticizing Japan because the increase percentage might be high but from the standpoint of economic power, which should be the basis of comparison, expenditures are still low, and are demanding "a military force commensurate with economic power." But that is an unreasonable complaint.

It is widely known that under the postwar Peace Constitution, Japan renounced war and even in rearmament, military investment which is detrimental to the healthy development of national economy has been kept low through the people's efforts. This has enabled a stronger economic development than other countries.

That European countries and the United States did not try to prevent or could not avoid the economic distortions and pressures created by militarization is one of the reasons for today's economic stagnation and to attempt to attain "equality" by imposing such a damaging handicap on Japan is not only unfair but dangerous.

By imposing an excessive military burden on economies which are inferior to those of Europe and the United States, the Soviet Union and the East European countries, too, are suffering from severe strains on people's livelihood and the social system. It shows how barren and unpromising for the future the argument for military power equal to economic power is, and on the contrary, it points out the need for various countries, including Europe and the United States, to lessen through disarmament the excessive military burden which oppresses welfare benefits and economies.

(3) Error of "Soviet Threat--Military Balance" Theory

While Japan's economy is suffering from a long-term recession and the nation's finances are burdened with deficits exceeding 100 trillion yen, why should military expenses be increased at the sacrifice of the people's livelihood and welfare? The underlying reason is the theory of "Soviet threat and military balance." On the premise that the postwar U.S. superiority in the East-West military balance has begun recently to crumble in the face of a Soviet military buildup, the Reagan administration has begun a great military expansion program to maintain its preeminence over the Soviets. Simultaneously, it is strongly demanding that the Western allies, particularly Japan, to shoulder a part of the task.

Basically, the Japanese Government is in agreement and in coordination with the United States, the Nakasone regime is accelerating military expansion. The 1983 "Defense white paper" states that if the Soviet military buildup is ignored, "the military balance will tend to swing to Eastern superiority," and that the potential threat toward Japan is increasing. For that reason, Japan should increase its military strength against the Soviets and especially now, Japan should aspire to advance from being a "Western ally" to becoming a "Western force," not only for Japan's safety but "to contribute to Western security." Thus, the government is needlessly increasing tension.

If this posture of "restraint by power balance" is taken, a country must resort to military expansion to obtain superior strength over the antagonist

and since the latter is forced to assume a similar stance, the way is opened for an endless armament race. Furthermore, the "balance theory" is often used to overestimate the antagonist's military capability in order to induce one's own military buildup. Actually, with respect to the East-West military balance, Soviet superiority is claimed by comparing quantity rather than quality or accuracy of armaments and that is being used as an excuse for military expansion. It must be said to be a comparison lacking in objectivity and comprehensiveness.

Taking military expenditures as an example, comparisons between East-West, U.S.-USSR, etc., based on source materials of the Stockholm International Peace Research Institution (SIPRI), is shown in Figure 3.

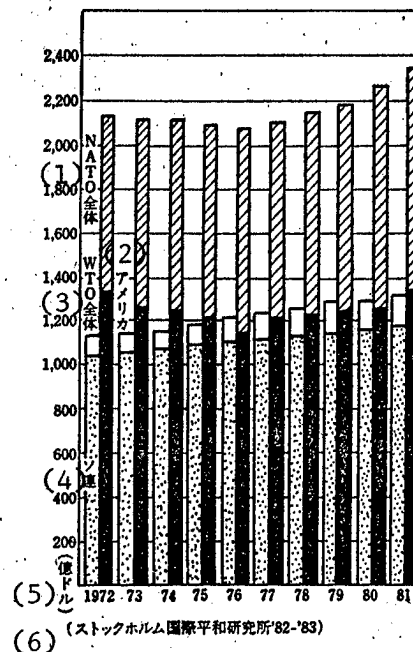


Figure 3. Military Power [Expenditures] of the World

Key:

- | | |
|-----------------------------|----------------------------------|
| 1. NATO | 5. \$100 million |
| 2. United States | 6. Stockholm International Peace |
| 3. Warsaw Pact Organization | Research Institution, 1982-83 |
| 4. USSR | |

According to the above figure, while the United States reduced military expenditures in the first half of 1970's, the Soviet Union appears to have increased them and as a result, both countries' military expenses drew closer. On that score alone, it might be said that U.S. one-sided superiority over the USSR in military power is declining but it also shows that U.S. military outlay is still larger.

However, when one considers that, in Europe, the USSR is allied with the Warsaw Pact in confronting NATO, it is inadequate to compare only the United

States and USSR. When NATO and the Warsaw Pact are compared, the difference in East-West military expenditures is apparent, and when one takes into consideration the resumption of military expansion by United States since 1977, the Western side is predominant as far as military outlay is concerned. Even from the standpoint of the balance of power theory, it is illogical to assert the need for military expansion. In fact, even in the United States, there are serious doubts about the assessment that the East-West military balance is crumbling and that the Soviet Union is gaining superiority over the United States. It is not necessary to point out that Reagan's policy of "military expansion before disarmament" is being criticized.

In any event, the military strength of the United States and the Soviet Union, which is based on nuclear weapons, possesses enough destructive power for mutual kills many times over, and from that viewpoint, the argument itself about "balances and gaps" practically loses its significance. The issue is not how to maintain and strengthen such a "balance of fear," but how to eradicate it and it should be noted that only disarmament and opposition to nuclear weapons will lead to freedom from fear, and to peace.

2. 1981 Mid-Term Program and Financial Burden

(1) 1981 Mid-Term Program and Military Spending Increase

Presently, the aim of Japanese military expansion is clearly expressed in the 1981 mid-term program. The important factor in the 1981 mid-term program and military spending increase is, in other words, only its financial facet. In October 1976, as a follow-up to the Fourth Defense Buildup Plan, the government formulated the "National Defense Program Outline" and made clear the design to not only build up military capability quantitatively, as before, but to improve it qualitatively. To implement the "program outline" in stages, the Defense Agency has been drafting "Mid-Term Program Estimates" and states that the 1981 mid-term program is the program estimate covering 5 years from 1983 to 1987 and during this period, military capability will be built up to the level anticipated in the "program outline."

Regarding this course, the Reagan administration has repeatedly, in speech and actions, taken actions which might be interpreted as internal meddling, such as criticizing the "program outline" as outdated, and calling for its reassessment and acceleration. Under such circumstances, the Defense Agency's explanation notwithstanding, the 1981 mid-term program is fully meeting U.S. demands by going beyond the concept of a "peacetime military capability" and planning for qualitative progress to ready a "standing military force to meet crises." The statement by Donnelly [Lt Gen Charles L. Donnelly, Jr.], commander of U.S. Forces Japan, that "I believe the program outline was revised on such items as defense of the sea lanes," touches on the substance of the matter.

As a result, the 1981 mid-term program substantively incorporates attack-type weapons system, including F-15's, P3C's, etc., and in Reagan's concept of simultaneous, multiple wars, assumes Japan's role in sea-lane defense, i.e., blockade of the three straits. It aims to change the strategy from

passive defense to active defense and counterattack and highlights the posture of officially adopting the course of collective defense. That action far exceeds the program outline requirements and the Defense Agency's comment that the 1981 mid-term program aims to meet the program outline standards is only an explanation to deceive the public.

Therefore, the procurement expenses for offensive weapons/frontal armament in the 1981 mid-term program reach a staggering sum and are estimated to be between 4.4 and 4.6 trillion yen. Moreover, the 1981 mid-term program is not regarded simply as a Defense Agency's internal reference material, as before, but authorized as a government-level agenda because it has been taken up by the National Defense Council. In future budget formulations, it has an actual binding power on its implementation and strengthens the fear that expansion of military budgets and increases in military spending in the future might become a fait accompli.

(2) Four Trillion and Several Hundred Billion Yen for Frontal Armament Expenses

As mentioned earlier, frontal armament expenses in the 1981 mid-term program amount to 4 trillion and several hundred billion yen. Assuming that the sum is to be budgeted and the plan implemented in the 1981 mid-term program, let us estimate what the military expenditures might amount to in the future.

Table 1. 1981 Mid-Term Program--Total Defense Budget and GNP Ratio
With Frontal Armament Expenses Occupying 25 Percent

FY	Frontal Armament Expenses (a)	a/b	Defense-related Expenses (b)	GNP (4% Average Annual Increase) (c)	GNP Ratio (b/c)
1983	617.6*	22.4%	2**754.2*	281**700.0*	0.98%
1984	741.1	25.0	2 964.4	292 968.0	1.01
1985	889.3	25.0	3 557.2	304 686.7	1.17
1986	1**067.2	25.0	4 268.8	316 874.2	1.35
1987	1 280.0	25.0	5 120.0	329 549.1	1.56

[Note: *=1 billion yen; **=1 trillion yen]

The frontal armament expenses budgeted for FY1983, which is the 1st year of the 1981 mid-term program, amount to 617.6 billion yen. Using that as the base, approximately 20 percent must be added annually in order to attain the goals during the 1981 mid-term program (see column "a" of Table 1). The ratio occupied by frontal armament expenses in the military budget is 22.4 percent for this fiscal year but since it is rising annually, it should be estimated at 25 percent for the future, making the total military budget, including frontal armament expenses, over 5 trillion yen in FY1987, the final year of the 1981 mid-term program (see column "b"). On the basis of "Outlook and Guidance for Economic Society of 1980's," a 4 percent annual growth is estimated so the GNP for FY1987 should be 329 trillion 549.1 billion yen (see column "c") and the ratio to GNP should increase to a surprising 1.56 percent.

Then, the problem confronting the implementation of the 1981 mid-term program is the obvious increase in military spending and it is not an exaggeration to say that breaking the ceiling of GNP 1 percent ratio, which had been mentioned as a financial brake on military outlay, is a predetermined course of action. Actually, the Defense Agency estimates the total military spending during the 5-year 1981 mid-term program at between 15.6 and 16.4 trillion yen, and during this period, 1 percent of GNP, calculated on the basis of the aforementioned 4 percent annual growth, will be 15 trillion 222.2 billion yen so even a simple comparison will show that 1 percent of the GNP will be easily exceeded.

(3) Breaking the GNP 1 Percent Limit

In November 1976, immediately after drafting of the "program outline," the government decided at a cabinet meeting that the military buildup planned in the "program outline" will be "carried out without spending a sum exceeding one one-hundredth of gross national product" for that fiscal year. Since then, "program outline and GNP 1 percent limit" has been the framework for military armament and financial outlay.

However, even with respect to the GNP 1 percent ceiling, there have been clamorous voices, including the U.S. Congress request to remove and increase it to 1.5 percent, as well as domestic and overseas demands to increase Japan's share of military expenditures. Even the Japan Strategic Research Center, which is said to be the operational headquarters for military expansion, is advocating that the limit be raised to 2.5 percent. Believing that lifting the 1 percent ceiling before the general elections will invite criticisms, the government/Defense Agency are postponing the issue but at the latest, the problem cannot be evaded in preparing the FY1985 budget and they will be forced to make the difficult choice of abandoning the accomplishment of goals during the 1981 mid-term program or exceeding the 1 percent limit.

In fact, the military budget is increasing yearly and relentlessly approaching the GNP 1 percent limit. In FY1983, the government estimate is that 1 percent of GNP will amount to 2,817,000,000,000 yen while military outlay will be 2,754,200,000,000 yen so the difference is only 62.8 billion yen and the ratio to GNP is 0.98 percent. If the basic wage rate increase recommended by the National Personnel Authority is added, there is hardly any gap and even from this standpoint, it must be said that the breakthrough of the 1 percent ceiling is only a matter of time.

The problem does not rest there. Excluded from Japan's military outlay are military pension costs which more than quadrupled in the past 10 years and rose to an annual 1.6 trillion yen. The Maritime Safety Agency's budget of 117.5 billion yen is another separate item. If this is included, i.e., if calculated according to the NATO formula, Japan's military outlay totals 4,475,300,000,000 yen and reaches 1.59 percent of GNP (see Table 2).

Table 2. Calculation Based on So-Called NATO Formula

(Unit: 100 million yen)

Item	Fiscal Year					
	1973	1979	1980	1981	1982	1983
Military Expenses	9,355	20,945	22,302	24,000	25,861	27,542
Ex-Military Pension Costs	3,831	12,332	13,529	15,085	15,900	16,036
Expenses related to Maritime Safety Agency	412	1,142	1,128	1,179	1,190	1,175
Total	13,598	34,419	36,959	40,264	42,951	44,753
Ratio to GNP [%]	1.24	1.48	1.49	1.52	1.55	1.59

In addition, military expenses exceeding 20 billion yen are hidden in the budgets of other ministries and agencies, including the 18.7 billion yen in Ministry of Home Affairs. When all these expenses are put together, Japan's military budget reaches an immense sum, even in absolute figures, and is undeniably oppressing the people's welfare and the nation's finances.

In spite of that, with the claim that the 1 percent of GNP ceiling has no basis, the campaign recently has become rampant to eliminate the ceiling. However, the 1 percent limit--and I am not saying that spending is alright if it is within the limit--was established, at the least, as a financial brake to prevent Japan from becoming a major military nation. For that reason, removal of the 1 percent ceiling would nullify the control function of finances and create the risk of boundlessly inflating military expenditures. Within the government, there are some who are considering new restraints, such as "within 1 percent of the budget," on the premise that the GNP 1 percent ceiling will be exceeded but any brake that can be removed to suit military needs is nonsensical.

(4) Enormous Deferred Liabilities

Before formulating the military budget surpassing the GNP 1 percent limit, the government/Defense Agency used various means to obtain funds in advance. One of them is deferred liability. This is the system whereby, in procuring weapons, a small down payment is made at first and the balance is paid over a period of 5 years, at the most, or paid at the time the weapons are delivered. Generally, it is called "credit buying." There are two types, contract authorization and continuing expenditure, and both are exceptions to practices of "current fiscal year policy." Prior to World War II, military expenditures were treated as Emergency Military Expense Special Account, handled separately from the ordinary budget with the fiscal year extended to the war's termination (during World War II, 101 months were considered as 1 fiscal year), and details of war expenses were kept entirely secret. To eliminate such abuses, the "current fiscal year policy" was established and is one of the democratic financial practices. Therefore, use of exceptional measures, such as deferred liability, should be exercised with utmost caution, particularly with respect to military expenditures in view of past

developments, but the Defense Agency is misusing this system by obtaining budget allocations in advance and leaving enormous liabilities for the future.

In the FY1983 budget, previous liability which had to be paid this year amounted to 855 billion yen, and in the FY1984 estimated budget request, the liability will amount to 985 billion yen. The percentage taken up in military outlay is increasing annually and has already exceeded 30 percent (see Figure 4).

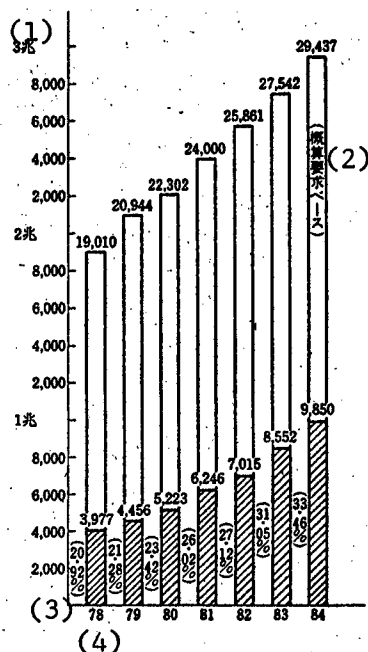


Figure 4. Amount and Percentage Occupied by Credit Payments (Deferred Liabilities) in Defense-Related Expenses of Various Years

Key:

1. Trillion yen [unit: 100 million yen]
2. Estimated budget request base
3. Percent
4. Years--1978, 1979, etc.

This fiscal year's new contract authorization amounted to 966 billion yen, of which only 25 billion yen, or 2.6 percent, were committed as down payment with the remainder charged, in entirety, as deferred liability. The situation is worse with the continuing expenditure and of the total of 140 billion yen, the 1st-year payment is only 1.3 billion yen and the remainder credited to future payments. These past obligations, added to liabilities to be deferred from the next fiscal year, will amount to 1,975,000,000,000 yen, i.e., a sum equivalent to 72 percent of this year's budget remains as deferred liabilities. Next fiscal year's deferred liability will further increase to 500 billion yen and the total deferred liabilities will exceed the staggering figure of 2.47 trillion yen.

In spite of the talk about a military budget increase, the Defense Agency still considers it inadequate and is tenaciously seeking accomplishment of the 1981 mid-term program, is incurring new deferred liabilities exceeding 1 trillion yen annually. The agency is trying to utilize this to exert maximum pressure on obtaining future increases in military spending, and it is a certainty that the military cost commitment to pay the liabilities will become an increasingly heavy burden.

3. Other Causes of Sudden Increase in Military Expense

(1) Skyrocketing Weapon Prices

Military expansion in the 1981 mid-term program are the basic reasons for the military spending increase and the bigger ratio of frontal armament costs has been pointed out earlier but among them, the increase in weapon prices must not be overlooked. Upon entering the 1980's, munitions industries have become a trillion-yen industry and are becoming active because of military expansion budgets and direct armament procurements.

Since weapon procurement has been conducted, as previously, through voluntary contracts and not through competitive bidding, the factor of competitive prices does not enter and the possibility is great that prices are comparatively high. Furthermore, at present, oligopolistic practices have entered with 20 top-ranking firms, led by the Mitsubishi Group, holding 60 to 70 percent of the procurement quota (see Figure 5), and in order to maintain the production lines of large makers, procurement orders are partitioned through negotiations. In addition, various enterprises actively hire former ranking self-defense officers and there is a closer personnel tie between the military and industries.

Under these circumstances, the prices of principal weapons are skyrocketing at a speed faster than the upward spiraling commodity prices. For example, comparing 1978 and 1983 prices, the cost of each F-15, which is the show-piece armament of the 1981 mid-term program, and 75 of which will be procured during the program, will nearly double from 6.2 to 11.5 billion yen in the 5 years. Similarly, the cost of P3C's, 50 of which are expected to be purchased, will rise from 6.6 to 11.2 billion yen; antitank helicopters will nearly treble from 800 million to 2.3 billion yen; and "A" class escort destroyers (DD's) will rise from 28.1 to 41.6 billion yen. These are alarming cost increases.

The Defense Agency explains that the reasons for the cost increases are rises in commodity prices, exchange rates and domestic production ratio, outfitting of new armaments, etc., but since concrete details are not revealed, the matter is unclear. The issue is often taken up in Diet budget deliberations but even the unit costs are not yet precisely specified.

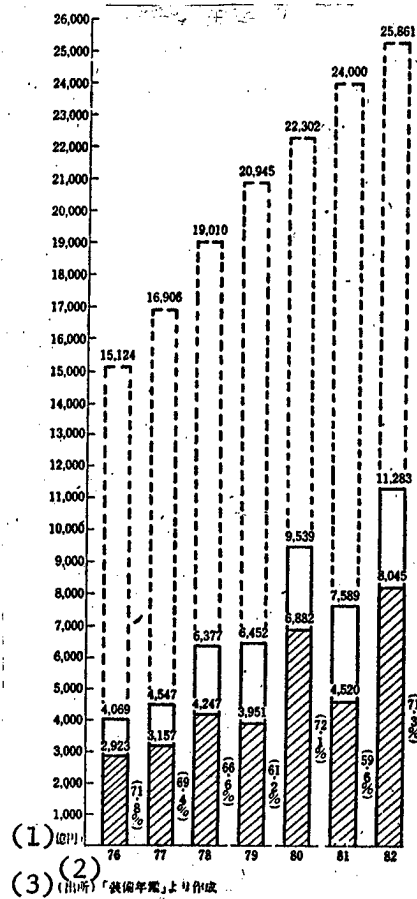


Figure 5. Contract Sum of Top-Ranking 20 Firms in Defense-Related Expenditures and Weapons Procurement, Etc.

Key:

1. 100 million yen
2. Years: 1976, 1977, etc.
3. Source: Compiled from "Armaments Annual"

(2) Sudden Increase of "Consideration Burden"

The sudden increase of "consideration burden" cannot be overlooked. By "consideration burden" is meant the equipment costs of facilities, labor costs, etc., which Japan provides the U.S. forces in Japan. It started as Japan's share of expenses, out of "consideration" for the United States, in 1978 when the dollar was cheap and the yen was expensive, and the term has continued to be used.

At first, costs amounted to about 6.1 billion yen but the United States annually requested an increase in Japan's share and in FY1979, the amount was 28 billion yen and reached 60.8 billion yen in FY1983. In 6 years, the sum increased by 10 times and appears to be escalating in the future. In particular, annual increase of facilities equipment costs is at a high 20-percent level and in FY1983, amounted to 43.9 billion yen, an increase of 24.8 percent, far exceeding the 6.5 percent increase in military outlay (see Table 3).

Table 3. Transition (Initial Budget) of Japan's Share (So-Called Consideration Budget) of Expenses of U.S. Forces Japan [U.S.FJ]

Item	FY1978		FY1979		FY1980		FY1981		FY1982		FY1983	
	Sum	Inc	Sum	Inc	Sum	Inc	Sum	Inc	Sum	Inc	Sum	Inc
Facility Costs	0	--	(8,662) 14,024		(13,217) 22,699	61.9	(18,282) 27,640	21.8	(23,983) 35,182	27.3	(30,342) 43,912	24.8
Labor Costs	6,187	--	13,964	125.7	14,279	5.5	15,876	7.8	16,388	3.2	16,895	3.1
Welfare Exp	6,187	--	7,200	16.4	7,573	5.2	8,661	14.4	9,148	5.6	9,359	2.3
Partial Wages	0	--	6,764 (8,662)		7,156 (13,217)	5.8	7,215 (18,282)	0.8	7,240 (23,983)	0.3	7,536 (30,342)	4.1
Total	6,187	--	27,988	352.4	37,428	33.7	43,516	16.3	51,570	18.5	60,807	17.9

(Unit: 1 million yen; %)

Note: Figures in () in "Sum" column of Facility Costs are Deferred Liabilities.

Heretofore, under the Japan-U.S. Treaty of Mutual Cooperation and Security, there were limitations in the provision of various facilities and at the least, Japan was supposed to provide them voluntarily but recently, strong U.S. demands have actually made it an official requirement. Particularly, U.S. Congress sources have begun to propose that since U.S.FJ bases exist for Japan's defense, Japan should shoulder, in the entirety, military base construction costs and in the 3 August Senate meeting, took the action of reducing the construction budget allocations to deploy F-16's at Misawa Air Base.

The Japanese Government has shown an extremely timid response and probably to avoid military friction, has accepted U.S. demands in toto and the Defense Facilities Administrative Agency has been downgraded now to "U.S. Forces Base Construction Corporation." Acceding to U.S. demands, the agency is trying to build 1,000 units of U.S. forces housing at the former Ikego ammunition depot in Kanagawa Prefecture against the strong opposition of local residents, and has decided on the first-phase construction of 248 housing units and 4 barracks at Misawa base to facilitate the deployment of F-16's.

Recently, the scope of the construction has extended from the housing units and barracks to oil storage facilities, maintenance shops, air raid shelters for F-15's, etc., of the U.S. Air Force. If that keeps up, it is possible that Japan will have to provide a training airfield for aircraft aboard the carrier, "USS Midway."

If Japan goes this far, it is not merely performing "considerate" acts but is engaging in the risky task of building a forward U.S. base against the USSR by strengthening and perpetuating U.S. facilities in Japan.

Conclusion

In this article, I have examined Japanese military expansion with the focus on military expense increase, particularly from budgetary and financial standpoints. Although not in-depth, I wanted to call attention to the point that the military budget itself, including direct armament expenses and deferred liabilities of the 1981 mid-term program, is already set up so as to perpetuate the increases.

If that is the case, it is futile to voice opposition against military budget increases on each occasion, year after year, and it is necessary to start full-scale movement and actions to dissolve the 1981 mid-term program which is at the root.

For that reason, the Japan Socialist Party is making concrete proposals to halt the 1981 mid-term program, which is the pillar of military expansion; freeze and reduce, on a planned basis, the military budget and completely eliminate attack-type weapons. It is necessary to convert these policies into tasks for effective action and implementation and to unite and develop them with the overall antinuclear-disarmament struggle.

On the other hand, in order to secure a nonnuclear peaceful zone in North-east Asia, not only are domestic movements needed but international actions, such as working on concerned countries, also are needed.

In contrast to the government's measures against a Soviet threat and a total reliance on a course of military expansion, these policies and movements constitute an aggressive means to create the foundation for international peace and for easing of strained relations. With an outlook such as this, the Japan Socialist Party must establish and promote a new peace strategy.

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ECONOMIC

INCREASE IN INVESTMENT FROM ABROAD DESCRIBED

Tokyo SHUKAN DAIYAMONDO in Japanese 18 Jun 83 pp 40-53

[Text] More Than 60 Percent of the Companies Increased Profit

During the last 10 years direct foreign investment in Japan has quadrupled. It is cumulatively as much as about \$3.5 billion (about 800 billion yen, as of March 1982), according to the Ministry of International Trade and Industry. In December 1980 the new "Foreign Exchange and Foreign Trade Control Law" was enacted so that the past "approval system" for direct investment in Japan was modified to the system of "principled freedom." Also, when Japan announced in May 1982 at home and abroad that it would open its market, interest in foreign investment in Japan, with the second largest market in the Free World, has been heightened.

Reflecting such a situation, new investments have been made successively. Commerce and services cover about 70 percent of the investments and manufacturing about 30 percent. The former type in the already existing foreign businesses was over 50 percent, the latter type 40 percent and others 10 percent.

Therefore, new investments are heavily in commerce and service. The current survey of the top 300 companies with foreign investment in Japan shows that by types of businesses commerce and service are the largest, with 34 percent of the total. This is followed by chemicals with 17 percent, electric machinery with 9 percent, pharmaceuticals and medical equipment with 6 percent and machinery with less than 6 percent. These are the top-ranking types of businesses.

The previous survey showed that commerce and service were 26 percent, chemicals 15 percent, pharmaceuticals and medical equipment 10 percent, other manufacturing 9 percent and electric machinery 7 percent. The current survey shows that the number of enterprises related to electric machinery has increased.

In the 1983 edition on the reported earnings in 1982 the number of companies that increased reported earnings was 183 out of 300 companies, or 61 percent of the total. Of the 183 companies with increased profit, 35 companies achieved an over two-fold growth rate.

Top-ranking Companies, Familiar Faces

Of the 20 best companies in the 1983 edition only 2 companies, Japan Molex and Bristol-Myers, did not appear in the 20 best companies in the past 10 years. Others are, so to speak, "familiar faces." It tells us that to that degree they are entrenched in the Japanese market.

Except when Japan IBM was surpassed in the 1981 edition by oil refining companies that grew rapidly because of the foreign exchange difference on reported earnings in 1980, it has held on to the top place for nine times out of the past 10. Toa Fuel Industry occupied second place five times, and Nestle experienced being in second place three times.

Changes in earnings among the top 20 companies can give us an estimate of the moves of all foreign investment in Japan. The total earnings of the 20 companies during the past 5 years and the number of enterprises with more than 10 billion yen earnings are shown below.

Gross earnings Edition	(100 million yen)	Number of companies
1979	3428	11
1980	3536	16
1981	5749	15
1982	4217	13
1983	4044	12

The increase and decrease in the number of companies with more than 10 billion yen in reported earnings and the increase and decrease trend of the total earnings of the top 20 companies generally agree. But for 1980 and 1981, among these companies with more than 10 billion yen earnings, appeared companies with drastically increased earnings.

Steady Pace of the Top 10 Companies

In the following we will touch upon several companies that merit our attention.

Japan IBM. Although its settlement in December 1983 showed a 13.1 percent increase in earnings, its before-tax profit showed a 12.8 percent drop, and its after-tax profit a 9.2 percent drop. Its reported profit showed a 7.8 percent increase, but data available from the company showed decreased profit. This is caused by the difference between the business laws and the tax laws. Of the 13.1 percent in increased earnings, domestic sales showed a 13.1 percent increase, and the export sales a 6.2 percent increase. But since then exports leveled off. This was caused by the fact that the production system of the group's overseas factories was consolidated, and parts supplies from Japan became unnecessary.

In 1983 the amount of new investment, too, dwindled, and the selling-out ratio tended to rise. Thus demand for funds was not so great. As the growth in sales continues to be at a two-digit level, this will turn into increased profit.

Toa Fuel Industry. Its 1982 reported earnings showed a large, 43.1 percent growth over the preceding year. This came about because the 1981 reported earnings reflected the large-scale increased profit of 1980, which was compressed because the reserve for corporate taxes was approved. The amount of ordinary profit showed only a 3.8 percent increase.

The December 1982 settlement showed a 3.4 percent increase in earnings, but they decreased in terms of amount. Against high raw materials costs price revisions were delayed, and business profits decreased. The increase in ordinary profits was caused by the decrease in the burden for interest due to the improvement of finance and to the reduction in foreign exchange loss.

Fuji Xerox. Toward the goals of the 10-year plan--100 billion yen in sales in 1990 and a 60 percent ratio for copiers--the company has made steady progress. The October 1982 settlement as the object of the current reported earnings shows 198.2 billion yen in sales, or a 19 percent increase, and 20.6 billion yen in ordinary profits, or a 17 percent increase.

In 1981 it changed from a rental-only business to a partial-sale business. At the same time it established one after another sales companies with local capital in each area. The success in the policy shift was linked to the favorable settlement. The number of these sales companies has increased to more than 30.

Also, as Fuji Xerox has improved its technology and productivity, it has strongly tended to become a worldwide production center. Therefore, Fuji Xerox will necessarily increase exports so as to supply each company in the group. The October 1981 settlement showed a 30 percent increase, and in 1982 Fuji Xerox earned 35 billion yen, or a 64.4 percent increase. (If knockdown parts supply is included, its earnings will be as much as 50 billion yen).

On the occasion of its 20th anniversary the company started sales through a local area network called the "Insa [phonetic] net." This is a systematization of personal computers, word processors and other machines and will become indispensable to office automation. With the sale of the "insa net" the company is attempting to change from a producer dependent on copiers to all-purpose office automated equipment maker.

Revival with the Introduction of New Products

Japan Coca-Cola. The undisputed top soft drink maker reported 19.3 billion yen in earnings at the January 1982 settlement, or a 40 percent increase over the preceding year. The 1982 sales by the soft drink industry showed a minus growth. But Japan Coca-Cola displayed its power. Its main force, Coca-Cola, showed an increase of 3 percent over the preceding year. In addition to the recovery of the main product, the company was successful in its introduction of new products. After it started selling "Georgia Coffee" (in cans) 6 or 7 years ago, its sales increased by 20 to 30 percent every year. Furthermore, the nutritional drink "Real Gold," for which as king-sized goods, a national sales network was established, contributed greatly to sales and profit.

At a board of directors meeting on 23 May 1983 Japan Coca-Cola voted to promote Welton H. Johnson, managing director and vice president, to president. This is said to add more momentum to the improvement of the "Coca-Cola family" business. The non-cola "Sprite" has gained a top share of the market. The company wants to promote "Hi-C" and other products too, as the first- or second-ranking giant merchandise.

Japan Shaklee. This company is growing rapidly, riding high on the health food boom. Its main merchandise are natural vitamin E and various nutritional food supplements made primarily from soybean protein. These cover 85 to 87 percent of the total sales. The company has home detergents and skin care products. Its home office in the U.S. was established in 1956, and it is a pioneer in this field. Its Japanese corporation was established in 1975. Even though it has a short history, its proclamation that "these products are nutritional food supplements which use natural raw materials to balance nutrition by supplementing the diet of people living in this modern age" has won the hearts of consumers. This company has achieved the best records among its overseas subsidiaries.

Its unique sales method supports it. In a word, it is consignment sales. Even when a sales agent contract is signed, absolutely no deposit or quota is required. Returns are freely accepted. The salesperson receives a 22 percent commission on sales. When sales become large, the salesperson consigns part of the sales to others and receives back a fee of up to 8 percent for "branching out."

"The method is based on the premise that when you try produces and are satisfied, you can recommend them to others, too. Since the maximum safety of the transaction is assured for the selling party, this method has never created problems either in U.S. or in Japan," according to President Kimiaki Morishita.

When people become customers, the company at the same time signs a contract for consigned sales. They are called family members, and they currently number about 250,000. The number of those who engage in actual sales activity is 3,300. The growth rate is rapid, but "we do not care about the growth rate. If consumers accept our products, that will do." (Morishita)

With High-efficiently Raw Materials Strength Is Displayed

Toyo Products. This is a joint venture company by Toray Industries and DuPont of the U.S., each with an equal amount of investment established in 1964 for the purpose of commercially producing polyurethane elastic fiber. Polyester elastic fiber was developed by DuPont after over 15 years. In 1966 Toyo Products began to produce it under the brand name "operon" [phonetic] at Otsu City, Shiga Prefecture. Since then it has achieved a steady growth, and the company has become a top enterprise.

The drastic increase in earnings has become possible because in addition to the heightened sports fever in recent years, it has accommodated the needs for differentiation by seeking high efficiency. The elastic fitting feeling as in swim suits, training wear, body suits and casual slacks is popular.

Besides these, Toyo Products has begun to handle the non-woven material, "Sontara." Furthermore, since April 1982 the company has imported for sale the polyester elastic material, "Hytrel," from DuPont.

The company will start domestic production this summer.

It has been decided that Vice President Yoshitaro Sonko of Toray Industries will take office as president at the end of June. The emergence of a "new big-wig president" may be said to indicate the company's intent that it is determined to achieve growth.

From now on the company intends to add high-efficiency unique strategic materials to its ranks of battle. This company may be said to be one of the typical examples of excellent advanced joint ventures.

Sumitomo 3M. It started business in 1961 with the domestic production of industrial binding material. This was followed by the domestic production of adhesive tapes in 1962 and of magnetic tapes in 1963. The company has grown to be a top-class company. At present at its Sagami plant binding material, adhesive tapes, magnetic tapes and floppy discs are produced and sold. Also audio cassettes, video cassettes and connectors produced at its subsidiary, Yamagata 3M, are sold there.

In 1982, in addition to binding material, adhesive tapes, information-related video cassettes, floppy discs and computer connectors, the sale of insulation material for sportswear, "Shinsareto [phonetic]," was brisk.

Sumitomo 3M has a ratio of about 65:35 between domestic production and imports. But from now on the proportion of domestic production will tend to rise. Also for activation, expansion and nurturing of a new product group will be attempted. The company targets new products (5 years old or less) for 25 percent of total sales.

In 1983 the company estimates that it will increase sales by 10 percent. Diversification of sales clients seems to be one of the reasons for profitability.

Growth in the "Play" Market

Sega Enterprises. This is a top maker of amusement machines. It is a subsidiary of a New York-based conglomerate, Gulf and Western Industries.

Its earnings showed a 7.6-fold increase over the preceding year. Its growth rate was large, but this was due to low reported earnings in the preceding year.

To begin with, amusement machines are highly faddish, and their demand heavily fluctuates. For a while the "invader" boom profited the industry as a whole, but with the end of the boom, the industry became overstocked.

Sega was no exception. During that time it disposed of its dead stock, with the idea of getting ready for the next stage by pressing out the puss. As a result, reported earnings for 1981 were only 400 million yen.

Generally speaking, the business market has not risen since the invader game. However, although Sega estimates that there is not as much potential for growth as in the past, there is a deep-rooted potential demand. For this reason, the company intends to achieve a steady growth by throwing in new merchandise. On the other hand, it plans to offer merchandise for general customers to increase its growth. As its first step, it has begun to sell personal computers. By this diversification it plans to raise the current 25 billion yen in sales to 50 billion yen in the future. At that time the company estimates to have a 50:50 ratio between business merchandise and personal computers.

Fast-growing BMW with Differentiation

Amid the dwindling imported car market, BMW has achieved large-scale growth in the number of cars sold. The imported car market reached its peak in 1979 with 60,000 cars. Since then the demand has kept declining. In 1982 the market was 35,508, or a 7 percent decrease over the preceding year or as much as a 41 percent drop over the peak period. In this atmosphere, BMW grew from 3,662 in 1981 to 5,293 in 1982, or an amazing 45 percent increase.

Luda Peifen [phonetic], managing director of Japan BMW, mentions the factors for favorable growth as: "First of all, it is a good product: BMW is high quality and high efficiency and suits the individualized life style of consumers. In addition to that, a sales company has been established with 100 percent investment from the manufactures, and it has made an enormous investment in personnel, marketing and dealerships, without being bound by considerations of a short-term profit."

Because the company has capital of 2.97 billion yen, it is conspicuously large as a sales company with foreign investment. In this case one can see the determination of the company to sink its roots deeply into the Japanese market.

The number of employees has been strengthened from 210 to 261, with a concentration on marketing and advertising staff. Plans call for increasing the manpower to 290 this year.

It showed a 45 percent growth last year and a 31 percent growth during the 1st quarter of 1983. Last May the small car, the 381i, was completely remodeled and thrown into the Japanese market to spur the sales expansion. The company was eager to arouse demand for the car among consumers, who are used to Japanese cars, and to "keep increasing the sales by 20 percent each year."

Toshiba EMI. This is a record and music tape sales company. Of the total sales, 66 percent are in records, 29 percent in music tapes and 4 percent in software-related items. This is one of the large record companies with its own record manufacturing factories. There are about 25 record companies in Japan, but only seven of them have record manufacturing factories.

The large increase in reported earnings for 1982 (43.8 percent) was partially brought about by So Terao's big hit, "Ruby Ring." Even though it was an LP record, it scored-breaking sale of over 1 million.

A new contract singer, Hiroko Yakushimaru, and others were added. In the recording industry, because FM broadcasting and records have been passed around, individual recordings have increased, and sales of records have hit the ceiling.

Toshiba EMI, too, faced a reduction in sales in 1983, as it had too good a year in 1982.

Notes to Table:

1. In the survey 300 top-ranking enterprises with over 20 percent foreign investment were selected.
2. No capital amount is shown in Japanese branches and offices of financing and insurance companies; these enterprises are indicated with an asterisk *.
3. Because Asahi Dow has merged with Asahi Kasei, it will not be included in the survey from now on.
4. Levi Strauss Japan was changed in November 1982 from a Japanese branch to a Japanese corporation.

[Table on following pages]

Rank	Company	Type of Business	Reported Earnings (100 million yen) 1982	Reported Earnings (100 million yen) 1981	Japanese Investing Company	Foreign Investing Company	Tele- phone Numbers	Capital (100 mil- lion yen)
1	Japan IBM	Office machine leasing	75,707	70,209	--	IBM World Trade Corp. (U.S.)	03-586- 1111	750
2	Toa Fuel Industry	Oil refining	42,837	29,944	Fuji Bank, Industrial Bank of Japan and others	Esso Eastern, Inc. (U.S.); Mobil Petroleum Co., Inc. (U.S.)	03-213- 2211	222.64
3	Toyo Industry	Automobile manufacturing	40,143	40,244	Sumitomo Bank and others	Ford Motor Co. (U.S.)	082-282- 1111	427.44
4	Fuji Xerox	Office, public equipment manu- facturing	32,790	25,753	Fuji Photo Film	Rank Xerox, Ltd. (U.S.)	03-585- 3211	100
5	Nestle	Foodstuff manufacturing	31,058	40,296	--	Nestle Alimen- tana S.A. (Switzerland)	078-251- 6161	340
6	Matsushita Electronics Industry	Electronic tube, semiconduc- tor manufacturing	26,598	37,164	Matsushita Electronics Industry	N.V. Phillips Gloeil Ampenfa- brieken (Holland)	0726-82- 5521	210
7	Esso Oil	Wholesale Petroleum	22,986	19,684	--	Esso Eastern, Inc. (U.S.)	03-548- 6211	200
8	Mobil Oil	Wholesale Petroleum	19,408	20,514	--	Mobil Petroleum Co. (U.S.)	03-244- 4691	110
9	Japan Coca- Cola	Foodstuff, foodstuff manufacturing	19,300	13,784	--	The Coca-Cola Export Corp. (U.S.)	03-407- 6311	36
10	Taito Pfizer	Drug manufacturing	14,996	9,629	Taito Co.	Pfizer, Inc. (U.S.)	03-344- 4411	74
11	Japan NCR	Office, public equipment manufacturing	12,850	9,047	Japan Secur- ities Financ- ing and others (U.S.)	National Cash Register Co. (U.S.)	03-582- 6111	80

12	Caterpillar Mitsubishi	Construction, mining machine manufacturing	10,437	12,798	Mitsubishi Heavy Industry	Caterpillar Overseas S.A. (Switzerland)	0427-62- 1121	204
13	Yokogawa Hewlett- Packard	Electronic applied device manufacturing	9,648	9,873	Yokogawa Electric Works	Hewlett-Packard Co. (U.S.)	0426-42- 1231	13
14	Isuzu Motors	Automobile manufacturing	8,368	16,924	Daichi Kangyo Bank and others	General Motors (U.S.)	03-762- 1111	380
15	Yamatake Honeywell	Electric measur- ing instrument manufacturing	7,912	7,069	Yasuda Fire Marine and others	Honeywell, Inc. (U.S.)	03-409- 7171	42
16	Sumitomo 3M	Chemical industry	7,212	5,496	Nippon Elec- tric Works, Sumitomo Elec- tric Industry	3M, Inc. (U.S.)	03-709- 8111	59
17	Japan Molex	Electronic equipment parts manufacturing	5,835	3,943	--	Molex Inter- national, Inc. (U.S.)	0462-61- 4500	14
18	Bristol Byers	Wholesale pharmaceuticals, medical supplies	5,594	5,923	Banyu Phar- maceutical	Bristol Myers Co. (U.S.)	03-432- 3211	14
19	Japan Oil Seal Industry	Industrial rubber product manufactur- ing	5,396	4,963	Individuals, Toyota Motors and others	Freudenberg Beteiligings GmbH (West Germany)	03-432- 4211	75
20	Japan Tupperware	Synthetic resin product manufactur- ing	5,295	6,077	--	Rexall Drug & Chemical Co. (U.S.)	03-265- 5252	2
21	Japan Shaklee	Foodstuff, cosmetics sales	5,177	3,087	--	G.R. Interna- tional (U.S.)	03-478- 1061	0
22	Bridgestone Bekaert Steel Cord	Steel material manufacturing	5,116	6,004	Bridgestone Tire	N.V. Bekaert S.A. (Belgium)	03-567- 2141	20

23	Japan McDonald	Restaurants	4,672	3,966	Fujita Co.	McDonald's Corp. (U.S.)	03-344- 6251	3.24
24	Dainapot Radio Isotope Laboratory	Pharmaceutical manufacturing	4,384	4,235	Dainippon Pharmaceu- tical Co.	Abbott Laborator- ies (U.S.)	03-437- 9441	2
25	C.B.S. Sony	Wholesale	4,330	6,229	Sony	C.B.S., Inc. (U.S.)	03-266- 5995	14.4
26	Japan Univac	Wholesale industrial elec- tric equipment	4,325	2,530	Mitsui & Co. and others	Sperry Corp. (U.S.)	03-585- 4111	36.8456
27	Japan Texas Instruments	Electronic tube, semiconductor manufacturing	4,201	3,015	--	Texas Instru- ments, Inc. (U.S.)	03-498- 2111	1
28	Sony Tek- tronix	Electric measur- ing instrument manufacturing	4,201	5,226	Sony	Tektronix, Inc. (U.S.)	03-448- 4611	4
29	TBS Britannica	Book, magazine publishing	4,142	4,615	Tokyo Broad- casting System	Encyclopedia Britanica Hold- ing Co., Inc. (U.S.)	03-230- 0311	10
30	Asahi Dow	Plastics manu- facturing	4,089	6,682	Asahi Chemi- cal Industry	Dow-Chemical A.G. (Switzerland)	03-507- 2730	100
31	Polyplastics	Plastics manu- facturing	3,971	4,879	Daicel, Ltd.	Celanese Corp. (U.S.)	06-266- 1521	28
32	Japan A.M.P.	Wiring equipment manufacturing	3,965	4,982	--	A.M.P., Inc. (U.S.)	03-404- 7171	26
33	Gotenba Tetrapak	Processed paper manufacturing	3,757	3,434	--	Tetra Interna- national (Sweden)	03-585- 5911	70
34	Sumitomo Rubber Industry	Tire manufactur- ing	3,705	2,443	Sumitomo Electric In- dustry, Long- term Credit Bank and others	Dunlop Interna- tional, Ltd. (U.K.)	078-231- 4141	63

35	Japan Special Agrochemical Manufacturing	Agrochemical manufacturing	3,693	3,140	Tateno, Ltd., and others	Bayer Co. (West Germany)	03-665-8151
36	Nikkei McGraw Hill	Book, magazine publishing	3,507	2,435	Nihon Keizai Shimbun	McGraw Hill, Inc. (U.S.)	03-270-0251
37	Citibank N.A.	Foreign bank	3,320	4,126	--	Citibank N.A. (U.S.)	03-279-5411
38	Japan Lederle	Pharmaceuticals manufacturing	3,304	3,705	Takeda Pharmaceutical	American Cyanamide Co. (U.S.)	0484-71-1551
39	General Electric Technical Service Co.	Electronic applied device manufacturing	3,292	2,181	--	General Electric Co. (U.S.)	03-405-2751
40	Toppan Moore	Paper product manufacturing	3,290	3,052	Toppan printing	Moore Corp., Ltd. (Canada)	03-295-2411
41	Tokyo Measuring Instrument	Measuring, testing instrument manufacturing	3,286	3,121	Takahashi Co., Astron and others	Sperry Rand Corp. (U.S.)	03-732-2111
42	Nifuko	Industrial resin parts manufacturing	3,215	2,968	Individual	Illinois Tool Works, Inc., and others (U.S.)	045-823-1211
43	Toyo Products	Chemical fiber manufacturing	3,105	2,028	Toray Industries	E.I. DuPont de Nemours & Co. (U.S.)	03-270-2591
44	Sega Enterprises	Office, daily equipment manufacturing	3,056	402	--	Gulf and Western Industries, Inc. (U.S.)	03-742-3171
45	Toyo Aluminum	Aluminum, alloy manufacturing	2,917	2,318	Light Metal Scholarship Foundation, Sumitomo Metal Industry and others	Alcan Aluminum Ltd. (Canada)	06-271-3151
46	Ajinomoto General Foods	Foodstuff manufacturing	2,762	396	Ajinomoto	General Foods Corp. (U.S.)	03-358-3000

47	Bayer Pharmaceuticals	Organic chemical products	2,675	5,143	Takeda Chemical, Yoshitomi Pharmaceutical (West Germany)	06-261-8771	10
48	BMW	Wholesale automobiles	2,668	404 (changed)	--	03-499-6811	29.7
49	Avon Products	Fragrance, cosmetics manufacturing	2,640	2,155	--	03-406-1141	34
50	MAX	Specialty industrial machine manufacturing	2,598	2,306	Nippon Life Insurance, Fuji Bank and others	03-669-0311	14.64
51	Warner-Lambert	Pharmaceuticals manufacturing	2,591	2,664	--	03-447-5311	24.88
52	Toshiba EMI	Record manufacturing	2,588	1,800	Tokyo Shibaura Electric	03-587-9131	15
53	Japan Merck Banyu	Pharmaceutical manufacturing	2,561	451	Banyu Pharmaceutical and others	03-271-6241	73.46
54	Mitsubishi Atomic Fuel	Nuclear fuel manufacturing	2,551	1,579	Mitsubishi Metal	03-214-0051	20
55	Japan Elanco	Chemical industry	2,546	2,432	Shionogi & Co.	06-363-2861	4
56	Teijin Agrochemical	Agrochemical manufacturing	2,521	2,523	Teijin, Ltd.	03-401-6631	8
57	Japan Schering	Pharmaceutical manufacturing	2,427	1,714	--	06-396-2300	29

58	Printing Machine Trading	Wholesale specialty industrial machines	2,395	3,270	Individual	The East Asiatic Co., Ltd. (Denmark); Hidelberger Druckmaschinen A.G. (West Germany)	0720-32-0441	11
59	Japan Tetrapak	Wholesale Japanese, foreign paper	2,388	2,142	--	Tetrapak Development, Ltd. (Switzerland)	03-585-5911	5
60	Exxon Chemical	Wholesale oils, fats, paints	2,331	2,830	--	Exxon Chemical (U.S.)	03-584-6211	15
61	Telsan	Liquified gas manufacturing	2,169	1,912	Mitsubishi Trust Bank and others	L'air Liquid S.A. (France)	078-251-5941	59
62	Caltex Oil	Wholesale petroleum	2,091	2,751	--	Caltex Petroleum Co. (U.S.)	03-502-1281	9.02
63	Burroughs	Office equipment leasing	2,090	5,817	--	Burroughs Corp. (U.S.)	03-235-5211	109
64	Japan Bairin [phonetic]	Felt manufacturing	2,051	1,236	Dainippon Ink and Chemical, Toray and others	Freudenberg & Co. (West Germany)	03-724-1914	20.35
65	Dow Chemical	Plastics manufacturing	2,018 (changed)	--	--	Dow Chemical A.G. (Switzerland)	03-502-5241	23
66	Shinto Plater	Metal processing machine manufacturing	1,970	11,994	Shinto Industry	Bepex Corp. (U.S.)	0568-22-1141	3.5
67	NSK Torrington	Bearing manufacturing	1,922	1,733	Dainippon Precision Industry and others	Torrington Co., Ltd. (U.K.)	0273-43-6431	7.2
68	Morgan Guarantee Trust Co. of New York	Foreign bank branch office	1,869	1,201	--	Morgan Guarantee Trust Co. (New York)	03-214-2761	*

69	Pelmelec [phonetic] Electrode	Industrial electric equipment manufac- turing	1,864	1,109	Mitsui & Co., Mitsui, Mitsui Shipbuilding	Chemnor Corp. 0466-87- 8831	0.9
70	Iwashiro Glass	Glass product manufacturing	1,855	1,734	Asahi Glass	Corning Inter- national Corp. 03-211- 5441 (U.S.)	20
71	Max Factor & Co., Japan Branch	Cosmetics, deter- gent manufacturing	1,835	174	--	Max Factor & Co. 03-463- 3611 (U.S.)	0.0024
72	Louis Vuitton	Wholesale luggage, bags	1,818	456 (changed)	Individual	Louis Vuitton 03-478- 3694 (France)	1.2
73	ICI Pharma- ceuticals	Wholesale pharmaceuticals, medical products	1,816	1,603	Sumitomo Chemical Industry	Imperial Chem- ical Industries, 8861 Ltd. (U.K.), and others	10
74	Maru P. Searle	Advertising production service	1,816	1,420	Dainippon Pharmaceu- tical	G. D. Searle & Co. (U.S.) 06-222- 3071	2.2
75	3M Pharma- ceuticals	Pharmaceuticals manufacturing	1,792	1,697	Sumitomo Electric, Nippon Electric	3M, Inc. (U.S.); Sumitomo 3M 03-709- 8261 (Japan)	4.8
76	Japan Nuclear	Nuclear fuel manufacturing	1,768	2,656	Hitachi, Ltd.; Tokyo Shibaura Electric	General Electric Co. (U.S.) 0468-35- 4111	20
77	Nippon Soda Master Builders	Chemical industry	1,766	2,340	Nippon Soda	Martin Marietta Corp. (U.S.) 03-582- 8811	15
78	Far East Oil Trading	Wholesale petroleum	1,758	2,791	Daiichi Petroleum Development	P.N. Pertamina (Indonesia) 03-503- 8151	4.8
79	Japan Polaroid	Wholesale opticals, cameras	1,755	2,911	--	Polaroid Overseas 03-434- 5201 Corps. (U.S.)	2.304
80	Daiichi Radio Isotope Labor- atory	Pharmaceutical manufacturing	1,724	1,148	Daiichi Chemical Phar- maceutical, Daiichi Phar- maceutical	Mallinckrodt, Inc. (U.S.) 03-272- 1651	4

81	Showa Daimond Chemical	Agrochemical manufacturing	1,714	1,463	Showa Denko	Diamond Shamrock Corp. (U.S.)	03-436-0981	4.32
82	Japan Engelhard	Inorganic chemical product manufacturing	1,701	1,835	Sumitomo Metal Mine	Engelhard Minerals and Chemicals Corp. (U.S.)	03-435-5490	5
83	Tokai TRW	Internal combustion engine manufacturing	1,680	1,487	Several individuals	TRW, Inc. (U.S.)	0568-31-8111	25.2
84	Japan Automatic Speed Changers	Driving device and other manufacturing	1,640	1,607	Nissan Motors, Toyo Industry	Ford Motor Co. (U.S.)	0545-51-0033	32.4
85	JGC Universal	Inorganic chemical manufacturing	1,635	664	JGC	Universal Oil Products Co. (U.S.)	03-212-7371	8.3
86	Kirin Seagram	Liquor manufacturing	1,621 (changed)	1,547	Kirin Beer	Joseph E. Seagram & Sons, Inc. (U.S.)	03-555-7371	50
87	Japan Glaxo	Pharmaceutical, medical goods manufacturing	1,608	260	Shinippon Industry	Glaxo Group, Ltd. (U.K.)	03-344-6611	14
88	Fuyo General Leasing	Office equipment leasing	1,587	642	Marubeni and others	Citicorp Person to Person, Inc. (U.S.)	03-214-6911	4.5
89	AIU Insurance Co.	Insurance against loss	1,556	1,045	--	AIU Insurance Co. (U.S.)	03-216-6611	*
90	EI-Thermco	Industrial kiln, furnace manufacturing	1,549	1,496	Tokyo Electron Laboratory	The Thermco Products Co. (U.S.)	045-471-8311	0.735
91	Roussel Medica	Wholesale pharmaceuticals and medical products	1,517	443	--	Roussel Uclaf Societe Anonyme (France)	03-241-7731	12.5
92	Karonaito Chemical	Organic chemical product manufacturing	1,510	1,437	Kao Soap	Chevron Chemical Co. (U.S.)	03-665-6371	10

93	Tokai Electro-Chemical	Inorganic chemical product manufacturing	1,503	1,203	Asahi Electro-Chemical Industry	F.M.C. Corp. (U.S.)	03-214-5951	8
94	Japan Butyl	Synthetic rubber manufacturing	1,496	1,643	Nippon Synthetic Rubber	Esso Eastern Chemical, Inc. (U.S.)	044-288-7351	28.8
95	Japan Memorex	Wholesale industrial electric machines	1,438	1,437	Kanematsu-Gosho and others	Memorex Corp. (U.S.)	03-273-8901	10.5793
96	Eagle Industry	Valve, parts manufacturing	1,429	1,363	Nippon Oil Seal Industry and others	Sealol, Inc. (U.S.)	03-438-2291	8.4
97	Deutsche Bank A.G.	Foreign bank branch office	1,409	1,746	--	Deutsche Bank A.G. (West Germany)	03-287-0981	*
98	Japan Otis Elevator	Elevator manufacturing	1,383	1,605	Matsushita Electric	Otis Elevator Co. (U.S.)	03-585-5311	26.181
99	Balcom Trading Incorporated	Wholesale automobiles	1,378	1,110	--	Henrique R. Fernandes (Portugal) and others	03-499-6811	0.06
100	Tokyo Organic Chemical Industry	Agrochemical manufacturing	1,367	1,991	Toa Compound Chemical Industry	Rohm & Haas Co. (U.S.)	03-911-0171	11.8125
101	Parke, Davis	Pharmaceutical and medical equipment manufacturing	1,366	929	Sankyo	Warner-Lambert (U.S.)	03-440-3811	5.2
102	Prima Ham	Meat product manufacturing	1,352	1,452	C. Itoh & Co. and others	Oscar Mayer & Co., Inc. (U.S.)	03-593-6710	49.8
103	Miles Sankyo	Pharmaceutical manufacturing	1,321	2,259	Sankyo, Ono Pharmaceutical cal	Miles Laboratories, Inc. (U.S.)	03-567-5511	2.5
104	Fine Cosmetic (Wella Cosmetic)	Fragrance, cosmetics manufacturing	1,265	527	Bankers group	Wella A. G. (West Germany)	03-456-6591	15

105	AMF	General firm	1,260	1,128	--	A.M.F. Overseas Corp. (Switzerland)	045-812-1414	4.5501
106	Toyo Stauffer	Inorganic chemical product manufacturing	1,255	1,387	Toyo Soda	Stauffer Chemical (U.S.)	03-274-1971	5
107	Japan National Can	Metal container manufacturing	1,232	762	Nichimen Co., C. Itoh & Co. and others	National Can Overseas Corp. (U.S.)	02992-3-6111	10
108	Sumitomo Bayer Uretan [phonetic]	Aliphatic intermediates manufacturing	1,186	422	Sumitomo Chemical Industry	Farbenfabriken Bayer A.G. (West Germany)	06-499-2401	32
109	Daiichi Bussan	Playland equipment	1,158	399	Individual	Yan Can-kun (Taiwan)	075-821-0510	0.4150
110	Smith Kline and French Overseas Co., Japan Branch	Pharmaceutical and medical products manufacturing	1,152	1,463	--	Smith Kline Beckman Corp. (U.S.)	03-403-1141	28.75
111	Manufacturers Hanover Trust Co.	Foreign bank branch office	1,140	540	--	Manufacturers Hanover Trust Co. (U.S.)	03-242-6511	*
112	Japan Monsanto	General chemical product manufacturing	1,131	1,057	--	Monsanto Co. (U.S.)	32-287-1251	0.3
113	Teijin Hercules	Petrochemical product manufacturing	1,110	827	Teijin, Ltd.	Hercules, Inc. (U.S.)	03-506-4739	7.2
114	Johnson	Oil and fat processed product manufacturing	1,108	808	Individual	S.C. Johnson & Sons, Ltd. (Canada), and others	0463-72-2111	12.8805
115	Japan Aerogil [phonetic]	Inorganic chemical product manufacturing	1,095	866	Mitsubishi Metal	Deutsche Gold and Silber Scheidentolt Vormals Rossler (West Germany)	03-402-5121	4.8

116	Japan Kentucky Fried Chicken	Retail edible meat	1,078 (changed)	900	Mitsubishi Corp.	Heublein Corp. (U.S.)	03-719-0231	6
117	Mitsui Furoro [phonetic] Chemical	Plastics manufacturing	1,074	1,133	Mitsui Petrochemical	E.I. DuPont de Nemours & Co. (U.S.)	03-214-5241	29.8
118	Sand Pharmaceutical	Pharmaceuticals manufacturing	1,073	1,863	--	Sand A.G. (Switzerland)	03-407-2121	12
119	Japan Burndy	Wiring equipment manufacturing	1,060	1,014	Furukawa Electric, C. Itoh & Co.	Aluminum Co. of America (U.S.)	03-443-7211	2.2
120	Japan Diners Club	Personal service	1,059	786	Japan Tourist Bureau, Nihonbashi Industry and others	The Diners Club (U.S.)	03-499-1311	1
121	Century Greyhound Leasing	Industrial equipment leasing	1,052	567	C. Itoh & Co. and others	Greyhound Leasing & Financial Corp. (U.S.), Continental Illinois Bank (U.S.)	03-580-8001	12
122	Japan Peroxide	Inorganic chemical product manufacturing	1,036	912	Hodogaya Chemical Nippon Chemical Industry and others	Laporte Industries (U.K.), Solvay & Cie S.A. (Belgium)	03-502-6501	8
123	Kao Atlas	Oil and fat processed goods manufacturing	1,023 (changed)	614	Kao Soap	Atlas Chemical Industries, Inc. (U.S.)	03-665-6314	13
124	Japan Lubrizol Industry	Organic chemical product manufacturing	1,021	629	--	Lubrizol Corp. (U.S.); Lubrizol Management, Inc. (U.S.)	05697-2-1321	9.24
125	Cosme France	Business service	1,014	1,036	Kobayashi Coffee	L'Oreal S.A. (France)	03-361-6540	0.5
126	General Motors Overseas Distribution	Wholesale automobiles	1,008	2,388	--	General Motors (U.S.)	03-470-1821	1.1

127	Comalco Japan	Wholesale nonferrous metals	995	778	--	Comalco, Ltd. (Australia)	03-583- 8791	5
128	Franklin Mint	General retail	987	1,072	--	Franklin Mint Corp. (U.S.)	03-437- 2011	3.3
129	Japan Medical	Medical machine and equipment manufacturing	985	954	Individual	Marie C. John- stone (U.K.)	082-243- 5844	5
130	Niigata Maso- neilan	Valve and parts manufacturing	981	1,054	Niigata Iron Works	Masoneilan Inter- national, Inc. (U.S.)	03-502- 6341	5
131	NSK Warner	Automotive parts manufacturing	977	965	Nippon Seiko	Borg Warner Corp. (U.S.)	0466-44- 6311	5.5
132	Musashino Geigy	Chemical industry	956	912	Musashino Chemical Laboratories	Geigy-Werke Schwerzerhalles A.G. (Switzerland)	03-272- 5501	6
133	Yamazaki	Bakery, confectioner	950	1,139	Yamazaki Bak- ery, Nichimen Co.	Nabisco, Inc. (U.S.)	03-344- 6211	16
134	Hoechst Japan	Wholesale general chemical products	950	2,808	--	Hoechst A.G. (West Germany) Hoechst Fermost (Switzerland)	03-479- 5111	10.895
135	Fuji Pulp	Internal combustion engine manufacturing	939	593	Daido Spec- ialty Steel	TRW, Inc. (U.S.)	03-585- 1201	7.62
136	General Trading	Merchandise handling	937	515	Individual	Trade Exceed (Hong Kong) and others	092-712- 6111	3.14
137	Essex Japan	Advertising design service	937	980	--	Schering Overseas, Ltd. (Bermuda)	06-532- 3232	25.2
138	Beecham Phar- maceuticals	Wholesale pharmaceu- ticals, medical products	935	463	--	Beecham Group, Ltd. (U.K.)	03-464- 9301	20
139	Shin nippon Industry	Wholesale pharmaceu- ticals, medical products	904	526	Toshin and others	Glaxco Group, Ltd. (U.K.)	03-561- 3181	9

140	Dick Hercules	Chemical industry	893	688	Dainippon Ink and Chemical	Hercules, Inc. (U.S.)	03-253-3161	9
141	Texas Instruments Asia, Ltd.	Wholesale industrial electric machines	892	684	--	Texas Instruments, Inc. (U.S.)	03-498-2111	0.0237
142	Shipley Far East	Wholesale general chemical products	884	861	--	Shipley Co., Inc. (U.S.)	03-230-0751	0.3
143	Warner Pioneer	Record manufacturing	862	537	Pioneer	Warner Bros. Records (Japan), Inc. (U.S.)	03-475-2111	1
144	Engineering Plastic	Plastics manufacturing	844	988	Nagase Industry	General Electric (U.S.)	03-665-3672	24
145	Sanshin Industry	Marine engine manufacturing	818	664	Yamaha Motor	Mercury Marine International Co. (U.S.)	0534-41-3111	0.97
146	Kure Norton	Abrasives manufacturing	815	819	Kure Grinding	Norton Co. (U.S.)	0823-31-7171	16.2771
147	Mister Minute Japan, Ltd.	Clothing, sewing repair	804	864	Horiuchi Industry	Luberman Welsley and Lompony S.A. (PANAMA), Wepp Service GmbH (West Germany) and others	03-400-9633	2
148	Japan Weiss	Dairy product manufacturing	800	658	--	American Home Products Corp. (U.S.)	03-407-6981	3
149	Bridgestone Imperial	Industrial rubber products manufacturing	780	997	Bridgestone	Gould, Inc. (U.S.)	03-274-5071	6.05
150	Scoville Japan	Notions manufacturing	778	971	Sanshin Industry	Scoville, Inc. (U.S.)	03-265-2631	3.
151	Hidekazu	Real estate sales	771	552	Hidekazu Four Seasons and others	Concord Security B.V. (Holland)	03-230-1011	2.2036
152	Petrochemical Badische	Foam resin manufacturing	770	708	Mitsubishi Petrochemical	B.A.S.F. Japan (West Germany)	0593-46-1111	16.

153	Sulzer Brothers (Japan)	Wholesale industrial machinery and equipment	769	132	--	Sulzer Brothers, Ltd. (Switzerland)	03-242-1551	4.95
154	Yokohama Aeroquip	Metal products manufacturing	737	343	Yokohama Rubber	Aeroquip International, Inc. (U.S.)	03-437-3511	5
155	Tsubakimoto Morse	Power transmission device manufacturing	730	968	Tsubakimoto Chain	Borg-Warner Corp. (U.S.)	0720-71-5151	4.5
156	General Petroleum	Oil refining	724	28,444	Individual	Esso Eastern, Inc. (U.S.)	03-595-8300	1
157	Japan Hilton	Hotel	721	629	--	Hilton Hotels International, Inc. (U.S.)	03-581-4511	14
158	Walt Disney	Various specialized services	718	285	--	Walt Disney Productions (U.S.)	03-404-1815	0.0125
159	Toshiba Silicon	Organic chemical manufacturing	709	1,156	Tokyo Shibaura Electric Co.	General Electric (U.S.)	03-479-5361	18.8
160	Japan Ransburg	Wholesale industrial machinery and equipment	698	961	Tokiko	Ransberg Electro Coating Corp. (U.S.)	03-732-5211	4.71
161	Bristol Myers Lion	Pharmaceutical manufacturing	695	668	Lion	Bristol Myers Co. (U.S.)	03-403-3101	2
162	Mitsu Polychemical	Plastics manufacturing	691	384	Mitsui Petrochemical	E.I. DuPont de Nemours & Co. (U.S.)	03-580-5521	64.8
163	Japan Myer	Fiber machinery manufacturing	689	510	--	Karls Myer Textile Maschinen Fabrik GmbH (West Germany) and others	0776-54-5500	10
164	Japan Lubrizol	Wholesale petroleum sale	688	643	--	Lubrizol International S.A. (Venezuela)	03-504-1345	4.43

165	Japan Ranco	Electric measuring instrument manufacturing	676	437	Nichiden Industry	Ranco, Inc. (U.S.)	03-261-4293	3
166	Bank of the Netherlands	Foreign bank branch office	666	700	--	Bank of the Netherlands	03-211-1767	*
167	Toray Thiolol	Chemical industry	664	511	Toray, Nomura Office	Thiolol Chemical Corp. (U.S.)	03-241-1845	4
168	Merck Japan	Wholesale pharmaceuticals, medical products	650	803	--	Merck A.G. (Switzerland)	03-591-9331	10
169	Asahi-Penn Chemical	Wholesale petrochemical products sale	650	374	Asahi Glass	P.P.G. Industries Inc. (U.S.)	03-234-0561	11.52
170	Bayer Japan	Wholesale general chemicals	643	291	--	Farbenfabriken Bayer A.G. (West Germany)	03-614-9111	10.52
171	Daikyo Rubber Precision Industry	Rubber products	634	680	Individual	The West Co., Inc. (U.S.)	03-614-5461	1.52
172	Japan Bristol Myers	General trading	632	597	--	Bristol Myers Co. (U.S.)	03-403-3211	12.12
173	Hayashi Co.	Playground equipment	632	314	--	Individual (Taiwan)	03-352-5095	0.1
174	Japan Sherwood	Medical equipment manufacturing	629	--	Mitsui & Co.	Sherwood Medical Industries, Inc. (U.S.)	03-355-9411	12
175	Japan Regulator	Electric measuring instrument manufacturing	628	522	Nippon Steel and others	Vapor Corp. (U.S.)	03-562-2201	2.82
176	Lloyds Bank International, Ltd.	Foreign bank branch office	623	771	--	Lloyds Bank (U.K.)	03-214-6771	*
177	Alcoa Japan	Wholesale nonferrous metals	618	220	--	Aluminium Co. of America (U.S.)	03-397-1701	1

178	Crown Leasing	Office equipment leasing	617	528	Nippon Land, Asahi Urban Development and others	American International Underwriters Japan, Inc. (U.S.) and others	03-581-7371	5
179	Nitta Moore Co.	Synthetic resin plate manufacturing	614	831	Nitta Belt	Eaton Corp. (U.S.)	06-266-1771	1.08
180	Japan Britanica	Publishing, printing	609	--	--	Encyclopedia Britanica Japan, Inc. (U.S.)	03-342-1351	15
181	B. R. Japan	Dairy product manufacturing	604	285	Fuji House	Faskin-Robbins, Inc. (U.S.)	03-449-0331	1.664
182	Chiyoda Machine	Metal processing machinery wholesale	595	713	Individual	Fruco Johs Kollen K.G. (West Germany)	03-402-7131	1
183	Niigata Converter	Power transmission device manufacturing	594	621	Niigata Iron Works	Twin Disc Clutch Co. (U.S.)	03-354-7111	10
184	Nisshin Co.	Trading firm	587	329	Individual	Individual (Hong Kong)	03-341-4866	0.02
185	Bangkok Bank Ltd.	Foreign bank branch office	585	828	--	Bangkok Bank, Ltd. (Thailand)	03-270-5841	*
186	A.C. Nielsen Co.	Market, public opinion research	583	507	--	A.C. Nielsen (U.S.)	03-710-6551	2.34
187	Nemic Ramda	Electronics applied device manufacturing	582	338	Individual	Veeco Instruments, Inc.	0258-22-1234	2.5
188	McCann, Ericson Advertising	Advertising agency	578	704	Hakuho-do	The Interpublic Group of Co. (U.S.)	03-475-1311	4.281
189	Sumitomo Durez	Plastics manufacturing	575	701	Sumitomo Bakelite	Hooker Chemical Corp. (U.S.)	0546-35-3131	6
190	Chiyoda Consultants	Real estate leasing	572	752	--	American International Underwriters, Inc. (Panama) and others	03-215-0288	1.29
191	Levi Strauss Japan	Wholesale clothing	570	481	--	Levi Strauss & Co. (U.S.)	03-586-8251	37.8

192	Cold Beck	Wholesale liquor	569	173	--	Anglo-Thai Corp., Ltd. (U.K.) 9181	03-263-9181	7.5
193	Japan Donaldson	Automotive parts manufacturing	567	964	--	Donaldson Co., Inc. (U.S.) 4111	0428-31-4111	1
194	Nisshin D.C.A.	Wholesale food-stuffs	560	416	Nisshin Flour Milling	D.C.A. Food Industries, Inc. (U.S.) and others	03-660-3836	3
195	Murata Warner Swesey	Metal processing machinery manufacturing	557	238	Murata Machine	The Werner & Swesey Co. (U.S.) 9141	075-681-9141	6.3
196	Sony Eveready	Electric machinery and equipment manufacturing	557	779	Sony	Union Carbide Corp. (U.S.) 1311	03-494-1311	13.5
197	Arai Manufacturing Co.	Industrial rubber product manufacturing	539	580	Tokyo Medium and Small Enterprises Investment and Development Co. and others	Carllock, Inc. (U.S.) 3141	03-696-3141	4
198	Karl Zeiss	Wholesale optical, camera equipment	536	1,619	--	Karl Zeiss (West Germany) 0341	030-355-0341	5.94
199	Berlitz Schools of Languages	Various educational facilities	529	644	--	The Berlitz Schools of Languages of America, Inc. (U.S.)	03-584-4211	1
200	Shin-Etsu Quartz	Glass product manufacturing	526	216	Shin-Etsu Chemical Industry	Heraeus-Schott Quarzschmelz GmbH (West Germany)	03-348-1911	2
201	Braun Japan	Wholesale home electric machinery, equipment	523	745	--	Braun A.G. (West Germany)	045-681-7951	0.9
202	Encor	Wholesale general chemical products	522	501	Nippon Glass	Corning Glass Works (U.S.) 8991	03-284-8991	1.5

203	ICI Japan	Wholesale general chemical products	518	564	---	ICI (U.K.)	06-202-5651	2
204	Fuji Davison	Inorganic chemical product manufacturing	518	344	Fuji, Ltd.	W.R. Grace & Co. (U.S.)	0568-51-2511	1.07
205	Japan Brunswick	Wholesale office, home appliances	516	465	Mitsui & Co.	Brunswick Corp. (U.S.)	03-355-9111	20
206	Nerdson	Wholesale specialty industrial appliances	509	617	---	Nerdson Corp. (U.S.)	03-763-6431	4
207	Elco International Corp.	Specialized trading firm	503	551	---	Elco Corp. (U.S.)	045-311-2181	4
208	International Leasing	General commodities leasing	500	151	Nippon Shinhan and others	Comco International, Inc. (U.S.)	03-272-7391	2
209	American International Underwriters	Electronics technology	499	575	---	American International Underwriters Japan, Inc. (Panama)	03-216-6611	1.1
210	Isolite Babcock Insulating	Asbestos, rock wool product manufacturing	495	815	Isolite Insulating Products Industry	The Babcock & Wilcox Co. (U.S.)	0538-8-3111	4.1
211	Revlon	Fragrance, cosmetics manufacturing	481	---	---	Revlon International Corp. (U.S.)	03-475-9103	45.505
212	Japan Electro Plating Engineers	Chemical industry	477	408	Tanaka Rare Metal Industry	Oxymetal (U.S.)	0463-32-8131	0.4
213	Nippon Tylan	Electric measuring instrument manufacturing	475	269	Individual	Tylan Corp. (U.S.)	03-395-9188	0.2
214	Japan Arbar Acres	Livestock industry, agriculture	473	396	Mitsui & Co.	Arbar Acres Farm Inc. (U.S.)	0545-85-2111	2
215	Time-Life Education System	General retail store	469	637	---	Time, Inc. (U.S.)	03-270-6611	1.5

216	Japan MSD	Wholesale pharmaceuticals and medical products	460	353	--	Merck & Co., Inc. (U.S.)	03-586-2711	1.6
217	Japan Phonogram	Wholesale	454	--	Matsushita Electric Industries, Japan Victor	Polygram B.V.	03-479-3711	4
218	Japan Roussel	Pharmaceutical manufacturing	452/452	203	Chugai Pharmaceutical	Roussel Uclat (France)	03-241-7731	2.75
219	Unita	Industrial rubber product manufacturing	445	451	Nitta Belt	Uniroyal, Inc. (U.S.)	06-251-5631	3.6
220	Oriental Diamond	Gem work	436	333	Sumitomo Shoji	De Beers European Holding S.A. (Luxemburg)	03-434-1200	2.7
221	Japan Dacros Shamrock	Metal products surface treatment	434	--	Nippon Oils and Fats	Diamond Shamrock Corp. (U.S.)	045-864-3551	5.25
222	Pfizer-Quigley	Wholesale stone, ceramic products	432	802	--	Pfizer Corp. (U.S.)	03-342-7331	5
223	Dodwell Remy	Wholesale liquor	432 (changed)	215	--	Dodwell Hong Kong, Ltd. (Hong Kong)	03-434-7241	1
224	Japan Plifrico	Fireproof products manufacturing	431	488	Daito Industry	Plifrico (U.S.)	03-455-1351	3.6
225	Japan Medtronic	Precision medical equipment manufacturing	429	551	--	Medtronic, Inc. (U.S.)	03-230-2701	0.6
226	Mitsubishi Cominco Smelting	Nonferrous metal smelting, refining	423	--	Mitsubishi Metal	The Consolidated Mining and Smelting Co. of Canada (Canada)	03-213-1321	2
227	Japan Rhodia Chemical	Agrochemical manufacturing	421	260	Showa Denko	Rhone, Poulenc S.A. (France) and others	03-431-8786	26

228	Petrochemical Shell Epoxy	417	558	Mitsubishi Petrochemical	Shell Industry (a subsidiary of Shell Oil [U.K.])	03-580- 0111	12
229	Tokyo Nickel	413	369	Shimura Chemical, Mitsui & Co. and others	The International Nickel Co. of Canada, Ltd. (Canada)	03-216- 6031	7.5
230	Tokyo Dover	412	220	Chusetsu Alloy Casting and others	Dover Corp. (U.S.)	03-230- 2211	4.9
231	Manpower Japan	411	538	--	Manpower, Inc. (U.S.)	03-582- 1761	0.5
232	Great American	409	830	--	Great American Insurance Co. (U.S.)	03-214- 4016	*
233	Purina Taiyo Petfood	401	357	--	Palston Purina (U.S.)	03-254- 6341	3.66
234	Japan Rolex	400	--	--	Liebermann Waekhl & Co., S.A. (Panama), and others	03-216- 5671	4
235	Applied Mater- ials Japan	398	408	--	Applied Materials, Inc. (U.S.)	03-348- 3881	0.21
236	Gadelivs	396	196	--	Gadelivs & Co. A.B. (Sweden)	03-584- 1411	25
237	San-Nopco	396	420	San'yogo Chemical	Diamond Shamrock Corp. (U.S.)	06-201- 4701	3
238	Japan Fenwall	384	411	Mitsui & Co., Nippon Elec- tric Heat	Fenwall, Inc. (U.S.)	03-503- 1641	1.2
239	Japan Inter- national Rectifier	384	340	Kyosan Works and others	International Rectifier Corp. (U.S.) and others	0463-82- 1111	7.15

240	Santen-Aragan [phonetic]	Wholesale pharmaceuticals equipment	382	387	Santen	Aragan [phonetic] Pharmaceuticals, Inc. (U.S.)	03-328-6666	0.75
241	Toyoda Sulzer	Textile machinery manufacturing	380	1,592	Toyoda Automatic Loom Works, Ltd.	Sulzer Brothers, Ltd. (Switzerland)	0562-46-1111	5
242	Keeper	Industrial rubber product manufacturing	380	579	Nissan Motors and others	George Argus & Co., Ltd. (U.K.)	03-561-9226	6
243	Determind Productions	Wholesale toys, recreational goods	380	134	--	Determind Productions, Inc. (U.S.)	03-585-0036	0.0057
244	Toppa Bureau of Engraving	Electronic tube, semiconductors	372	--	Toppa Printing	Bureau Engraving, Inc. (U.S.)	0484-78-5010	3
245	Arc International	Business services	371	--	--	Individual (U.S.)	03-444-1241	0.5
246	Briston Banyu Pharmaceutical	Pharmaceutical manufacturing	358	427	Banyu Pharmaceutical	Bristol Myers Co. (U.S.)	03-403-3211	9.6
247	MacGregor Golf	Wholesale sporting goods (changed)	353	209	--	MacGregor Golf Co. (U.S.)	03-431-8256	0.95
248	Japan Fisher	Wholesale plumbing temperature control devices	353	318	Miriya Co., Ltd.	Fisher Controls Co. (U.S.)	03-552-5751	8.6
249	Yo Bear-Rulon Industry	Industrial resin parts manufacturing	351	495	NTN Toyo Bearing	Dixon Corp. (U.S.)	059476-7221	1
250	Japan Ketchen [phonetic]	Inorganic chemical product manufacturing	345	420	--	Chemtex, Inc. (U.S.)	03-591-8381	4.8
251	Japan Security Pacific Finance	Loans	341	--	--	Security Pacific Overseas Finance, Inc. (U.S.)	03-982-9311	4.75
252	Japan Firmenich	Wholesale general chemicals	340	84	--	Firmenich Trading Co. (Switzerland)	03-543-5261	0.9

253	Japan Conoco	Tar, dyestuff manufacturing	339	572	Nissan Chemical Industry (U.S.)	Conoco, Inc. (U.S.)	03-296-8336	6
254	Johnson & Johnson Far East	Pharmaceutical manufacturing	335	413	--	Johnson & Johnson Far East, Inc. (U.S.)	03-438-2911	30
255	Computervision Asia	Wholesale industrial electric machinery	330	114	--	Computervision Corp. (U.K.)	03-342-3411	0.1
256	Japan Avionics	Communication equipment manufacturing	329	477	Nippon Electric	Hughes Aircraft Co. (U.S.)	03-501-7351	9.07
257	Japan Emerson	Electronic equipment parts manufacturing	327	325	--	Fesaito [pho-netic] Corp. (U.S.)	03-313-1145	3.07
258	Japan Dixie	Paper container manufacturing	324	355	Daishowa Paper, Daiwa Can	American Can Co. (U.S.)	03-437-0891	3.53
259	Memasutodo Cartier	Specialized firm	324	99	--	Lieberman Wacchi & Co. S.A. (Panama)	03-346-2274	2
260	Japan Henkel	Wholesale hardware	323	390	--	Henkel und Co. GmbH (West Germany)	06-541-0194	0.9
261	W. R. Grace	Chemical Industry	323	--	--	W. R. Grace & Co. (U.S.)	03-436-4751	0.74
262	Chanel	Wholesale cosmetics, detergents	321	171	--	Chanel International B.V. (Holland)	03-342-1420	1
263	Henkel Japan	Aliphatic intermediates manufacturing	317	246	--	Henkel Corp. (U.S.)	06-231-9281	3
264	Dow Corning	Industrial rubber product manufacturing	314	286	--	Dow Corning Corp. (U.S.)	03-503-6051	3.8

265	Maruzen Airex- press Inter- national	Freight forward- ing	313	278	Maruzen Showa Express	Wings and Wheels Express, Inc. (U.S.)	03-585- 6531	0.72
266	Niigata- Worthington	Air adjusting equipment manufacturing	312	299	Niigata Iron Works	Studebaker Worthington International (U.S.)	03-502- 3141	5
267	Simons Japan	Japanese and foreign furniture manufacturing	310	467	--	Simons Co. (U.S.); 0462-51- Simons, Inc. (Puerto Rico)	0833	3.1
268	Kao Quaker	Wholesale general chemical products	307	781	Kao Soap	The Quaker Oats Co. (U.S.)	03-665- 6437	4
269	Japan Luwa	Air adjusting equipment manufacturing	300	361	Nagoya Mach- inery, Shinto Industry	Luwa, Ltd. (Switzerland); Fides Trohand Fereigung (Switzerland)	052-962- 2511	0.99
270	Kokusai Machine Tool	Wholesale metal processing machinery	300	425	--	Individual	03-503- 7171	0.75
271	Mitsubishi Precision	Communication equip- ment manufacturing	294	160	Mitsubishi Electric, Mitsubushi Heavy Indus- tries and others	The Singer Co. (U.S.)	03-274- 4181	10
272	Japan Olivetti	Wholesale office, home equipment	294	168	--	Olivetti Inter- national S.A. (Luxemburg)	03-714- 1211	26
273	Japan Tekcell	Wholesale industrial electric machinery	289	194	Individual	Individual (U.S.)	03-461- 5121	0.25
274	First National	Public financing	286	101	Nippon Shinhan	Citicorp Services and others	03-502- 1441	1.25
275	Asahi Fiberglass	Fiberglass manu- facturing	284	167	Asahi Glass	Owens Corning Fiberglass Corp. (U.S.)	03-348- 0523	50

276	A.H.S. Japan	Wholesale precision medical equipment	277	1,303	--	American Hospital Supply Corp. (U.S.)	03-585-3537	14.05
277	Gadelius-Yarway	Wholesale plumbing air condition heating device	276	298	Individual	Yarway Corp. (U.S.) Gadelius (Japan)	078-252-1031	1
278	Taisho Trading	Grain wholesaler	276	609	--	Hong Kong Dachang-xing (Hong Kong)	03-582-0711	3.2
279	Nissan Gaadora [phonetic] Catalyst	Chemicals (catalysts)	275	54	Nissan Chemical Industry	Sued-Chemie A.G. (West Germany)	03-256-5611	3.55
280	Yamazato Electro-Nite	Electric measuring instrument manufacturing	275	311	Yamazato Industry	Electro-Nite, Ltd. (U.S.)	06-349-2130	0.5
281	B.A. International	Wholesale luggage, bags	273	265	Sanki Trading	Lieberman Wacchli Co. S.A. (Panama)	06-271-5303	0.4
282	Mitsui Toatsu	Liquefied gas manufacturing	271	181	Mitsui Toatsu	Liquid Carbonic Corp. (U.S.)	03-431-9131	5
283	Japan Millipore	Precision filters	268	305	--	Millipore Corp. (U.S.)	03-443-4514	0.27
284	Cohns & Co., Ltd.	General trading	265	889	--	Wheelock Marden & Co., Ltd. (Hong Kong)	03-272-5771	1.5
285	Letraset Japan	Wholesale paper products	261 (changed)	194	--	Letraset International, Ltd. (U.K.)	03-454-4301	Ø.6
286	Hakuto-Nalco Chemical	Chemical industry	261	194	Hakuto Chemical	Nalco Chemical Co. (U.S.)	03-500-1001	0.3
287	Japan Reliance	Heavy electric machinery	261	314	Nippon Vacuum Technology	Reliance Electric Co. (U.S.)	045-701-1770	3
288	Ebara Yujiraito [phonetic]	Metal processing machinery manufacturing	259	121	Ebara Mfg. Co., OMF, Inc. (U.S.) Ebara Inflico	03-833-0321		1

289	Japan Kellogg	Bakery, confectioner	258	--	--	The M. W. Kellogg Co. (U.S.)	03-344-0811	16.08
290	Japan Organon	Wholesale pharmaceuticals, medical products	258	337	Sankyo	N. V. Organon (Holland)	03-561-7931	7.75
291	Japan Gla	Wholesale specialty industrial machinery	257	386	Tokiko	Glaco, Inc. (U.S.)	03-413-2151	1
292	Japan Cambridge	Heating device manufacturing	254	228	Kondo Industry	Cambridge Filter International Corp. (U.S.)	03-404-8701	0.17
293	Sanken Airpacs	Electronic equipment parts manufacturing	251	280	Sanken Electric	North American Philips Controls Co. (U.S.)	0492-83-7771	0.4
294	President Co.	Publishing	250	298	Diamond Co.	Time-Life International (Holland)	03-478-1411	0.3
295	Koyo Lindberg	Industrial kiln, furnace manufacturing	250	189	Koyo Precision	Sola Basic Industrial, Inc. (U.S.)	07436-4-0981	5.04
296	Siemens	Wholesale industrial machinery, equipment	248	633	Fuji Electric Mfg., Daifichi	Siemens Betilg-uorgen (Switzerland)	03-490-2171	5.52
297	Harima M.I.D.	Chemical industry	247	270	Harima Chemical	The Mead Corp. (U.S.)	06-201-2461	3
298	Japan F.L. Smith	Wholesale specialty industrial machinery, equipment	239	124	Mitsui & Co., Nippon Kokan, Serizawa Iron Works	F. L. Smith & Co. A/S (Denmark)	03-542-3403	0.935
299	Hirose Cherry Precision	Wiring equipment manufacturing	238	280	Hirose Electric	Cherry Electrical Products Corp. (U.S.)	044-933-3511	0.95
300	Japan Siegling	Stevedoring equipment manufacturing	235	284	--	Ernst Siegling (West Germany)	045-314-5531	3.3

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ECONOMIC

EXCHANGE RATE POLICY DESCRIBED

Tokyo KIKAN GENDAI KEIZAI in Japanese Autumn 1983 pp 92-106

[Article by Yoichi Shinkai: "Japan's Exchange Rate Policy"; references contained in parentheses are to bibliography]

[Text] Ten years have passed since the March 1973 shift to the float. Its flaws can be said to be clear to everyone, and there are repeated arguments for a review of the float system. However, during its 10 years, the float has never fluctuated with complete freedom and, in the sense that policy has been managed with the exchange rate taken into account, whether to a great or small extent, we have actually been under a managed float system. We can probably call the policy that takes the exchange rate into account, "exchange rate policy." The objective of this manuscript is to review Japan's exchange rate policy over the last 10 years. Because my objective is to discuss exchange rate policy, I can do no more than touch very briefly, just as far as necessary, on the pros and cons of the float and on exchange rate theory.

I have been interested for some time in exchange rate theory and in the pros and cons of the float. I was not interested in exchange rate policy, and I cannot say that I researched the subject with particular enthusiasm. To review Japan's exchange rate policy, knowledge of the daily behavior of the foreign exchange markets is indispensable (as can be seen in the essays by Komiya and Suda that are cited later on). However, at present, I am not willing to invest the research time or money to seek this sort of knowledge, and what is written below has been derived from nothing more than monthly data and annual reports that were easy to obtain. I intended to go through as many related articles as possible, but I am afraid that there are points that I missed in the more important articles. In spite of that, I put this article together because it is believed that one cannot provide a view of Japan's exchange rate policy that is fairly short and easy to read.

This article is divided into four sections. The first both describes why exchange rate policy is viewed as important and offers a general outline of the instruments of exchange rate policy and their effects. The other three sections are devoted to a review of Japan's exchange rate policy. The second section is divided into four phases in accordance with the movements of the exchange rate itself; this section takes up the subject of exchange rate control in each of these phases. The next section is an analysis of intervention policy. This problem has many points of contention, and my evaluation of it,

of course, can be nothing more than tentative. The final section, along with discussing monetary policy as exchange rate policy, comments on whether Japanese and U.S. interest rates are linked under the float, and, if they are linked, whether the autonomy of Japanese monetary policy has been lost. This last topic has an intimate connection with the pros and cons of the float, but in this manuscript, I intend to comment on this from the standpoint of exchange rate policy.

1. What Is Exchange Rate Policy?

Judging from the recent arguments for cooperative intervention and a return to the fixed exchange rate, one would think that exchange rate policy is intervention policy, but that is not always the case. Intervention and exchange rate control are the most important instruments of exchange rate policy (at least for Japan). However, monetary policy also has an effect on the exchange rate, and at times, the exchange rate target and the monetary policy target are in conflict. In order to make known the views of the authorities on this, I have excerpted a speech by a former chairman of the West German Bundesbank. (I ought to cite a speech by a Japanese authority, but an appropriate example did not appear at hand.)⁽¹⁾

Virtually all countries must implement an exchange rate policy. In short, they have to be concerned about the movement of the exchange rate. In managing overall economic policy, they must take into consideration the movement of the exchange rate.... However, to confuse exchange rate policy with intervention policy is a mistake. Intervention policy is an instrument. There are other instruments, and many of these are clearly as important. Examples are monetary policy measures that are implemented after taking the exchange rate into account and economic policy measures that affect the international balance of payments (especially overseas borrowing policy)....

In this sense, international balance of payment policies, which include overseas borrowing, and fiscal and monetary policy are covered in exchange rate policy, along with exchange rate control and intervention. Moreover, as is well known, intervention has a different monetary effect according to whether it is accompanied by sterilization. In this section, I want to provide these preliminary views of exchange rate policy and to prepare a framework of analysis for the discussion of Japan's exchange rate policy in the following sections. Nevertheless, by its very nature exchange rate control is extremely complex, and a preliminary view would be useless. In what follows, I describe exchange rate policy theory as I see it, concentrating on intervention policy and monetary policy.¹

Effects of Intervention

Intervention by monetary authorities in the foreign exchange market consists of an exchange of the yen and the dollar as currencies (by taking into account the current exchange rate for the yen and the dollar). Because intervention has a direct effect on the foreign exchange market, its effectiveness as far as exchange rate policy is concerned can be expected to be high, and it is not without reason that intervention is given great consideration in ordinary

arguments. When we wish to counter a strong dollar, we intervene by buying yen and selling dollars. Thus, dollars will be supplied to the private sector (in a form close to cash), and the supply of yen will decline. This is the monetary effect of the so-called "pure intervention." When monetary authorities in Japan and Europe talk of intervention, they usually mean pure intervention. U.S. authorities, in many cases, take into account "sterile intervention," which will be described later.⁽⁴⁾

The foregoing example did not identify the country whose authorities intervened. As long as the implementation of intervention policy is at all possible (as long as a country has adequate foreign reserves when selling a foreign currency), I do not think that which country intervenes or whether both intervene together will make a great difference in the exchange rate and the monetary effect. However, across the world, the argument for cooperative intervention is being taken up seriously, and in the report of the finance ministers of the seven summit countries, which was released recently, this type of intervention is distinguished from independent intervention.⁽⁵⁾ Perhaps this will have the effect of causing the participants in the market to change their expectations after they are aware of the decision of the authorities.² Moreover, this cooperative intervention, which France has been advocating, can best be viewed as a means for a country to cover its own shortage of currency.

When two countries cause a change in the supply of currency so that the monetary effects of pure intervention are offset, the supply of currency for the private sector remains in its original state, and what occurs instead is an increase in the supply of dollar-denominated securities and a decrease in the supply of yen-denominated securities, as shown in the previous example. This is sterile intervention. Few can deny that pure intervention, especially intervention on a large scale, has a considerable effect on the nominal exchange rate. The doubts that are harbored about the effects of intervention concern sterile intervention. The previously cited report of the summit finance ministers, after stating that "it is recognized that the effectiveness of the intervention is high in cases...where it is not sterile," gives a considerably detailed analysis of sterile intervention. A summary is not all that easy, but the report appeared to have reached virtually the following conclusion.

Sterile intervention does not generally have a lasting effect. However, this intervention does have the effect of reducing short-term fluctuations of the exchange rate to counter the destabilization of the fabric of market transactions and the confusion in the market which can be caused by a shock. This can be said to be certain in regard to a majority of the case studies. Econometric analysis is said to have indicated that, at least, yen-denominated securities and dollar-denominated securities are not completely fungible.³ On the other hand (this is the same as saying that it does not have a lasting effect), intervention that attempts to revise the tone of the market does not always produce the desired effect.

Objectives of Intervention

Aside from maintaining the pegged quotation system, the objectives of intervention can be divided broadly into the exchange rate target, which causes a

specific exchange rate level to be realized for a certain period of time, and intervention that gently makes changes in the market in one direction (this is called "leaning against the wind," and is henceforth abbreviated as "LAW intervention"). In addition, there are the very short-term measures used to confront a disorderly market, which were considered to be effective as stated above, but I would like to ignore these measures in what follows because of data constraints.⁽⁴⁾ When the exchange rate target is achieved, one expects that a stable movement of the exchange rate will be observed. (Of course, there is stability even without intervention.) LAW intervention will be observed, for example, as coexisting with an advance of a cheap yen, when the intervention consists of selling dollars and buying yen.⁴

Can LAW intervention be implemented whatever the case? For example, if the yen were to rise from 300 yen to 200 yen (as it did from 1977 to 1978) with or without intervention, intervention would not make sense. This is because intervention can only slightly decelerate the velocity of the rise in the exchange rate. Authorities cite the objective of LAW intervention as prevention of the exchange rate itself undergoing multiple changes caused by fluctuations of market psychology (in other words, preventing a bandwagon effect). To resist the bandwagon effect is considered legitimate. However, it is not all that easy to discern whether the cyclical variations of the exchange rate actually observed are caused by a bandwagon effect or there is some other explanation. I do not intend to delve into exchange rate theory in this manuscript, but I will touch on it briefly.

Although the view is strong that multiple changes in the exchange rate itself can be denied from the standpoint of rational expectations, such changes do not in the least conflict with short-term rational expectations.⁽⁶⁾ On the other hand, from a standpoint that views short-term variations of the exchange rate as the reflection of new developments (the "news theory"),^(6a) the midterm cycle is nothing more than an accumulation of short-term random variations and there is no basis for justifying intervention. Furthermore, there is the position which, concentrating on midterm cycles, explains them by lags such as the J-curve effect and the tenacity of prices. Because of this position, we can say that there is a basis for intervention (insofar as lags, such as the slowness of information, cause instability in the market). Of course, there are other policy instruments besides intervention, and this point will be discussed later.

Intervention that takes the exchange rate level as its target has several objectives that are relatively easy to understand. When the exchange rate is deemed to be unfair in terms of economic fundamentals, the objective is to correct that. (There are cases in which time and labor factors are manifested until the market recognizes the error of its tone.) Sometimes the objective is to achieve a relatively undervalued level for the exchange rate in order to promote exports. On the contrary, there are times when the objective is to maintain a high exchange rate level to prevent an imbalance of exports and imports. Lately, the last-mentioned objective has begun to be stressed, and that probably reflects the inflation of the 1970's.

Monetary Policy

Monetary policy has an effect on the exchange rate, but opinion is split about the reliability of the effects of both the volume of money and interest rates. An increase in the money supply, seen from the long-term view, should cause the exchange rate to drop, but the short-term effect is uncertain. The relationship between currency and prices (the quantity theory of money), and the relationship between prices and the exchange rate (the purchasing power parity theory) are uncertain in the short term, and therefore do not have a clear effect on people's expectations concerning the exchange rate. However, when we discuss long-term rational expectations, the quantity of money will come to have an importance that cannot be ignored.

What about interest rates? I mentioned previously that sterile intervention can cause a change in the interest rate, but this is because sterile intervention causes a change in the supply of securities (the currency supply stays as is), and so the interest rate generally changes. A change in interest rates accompanies monetary policy even without intervention. If the gap between Japanese and U.S. interest rates changes, the exchange rate will be affected, but there does not appear to be a unanimous view as to direction or size. During the inflationary period of the 1970's, the difference in nominal interest rates quite often reflected the difference in inflation rates, and the exchange rate of a country with high interest rates tended to drop. Subsequently, the nominal interest rate in the United States changed greatly (along with the real interest rate), and the exchange rate of countries with high interest rates tended to rise. However, opinion is not unanimous regarding the distinction between nominal and real, and between short term and long term.

One cannot quite say that there is a majority theory on this subject, but most share the view that when there is a difference in long-term real interest rates, the exchange rate level of high-interest countries is high. One cannot deny that short-term interest rates have an effect on the exchange rate, but I cannot explain that theoretically (other than as a substitute variable for the expectations for long-term interest rates). This is largely because the extent of the short-term variation in the exchange rate is clearly caused by the difference in the interest rates. Moreover, the reason why, concerning long-term interest rates, the important thing is the real value and not the nominal value is that the relationship between interest rates and the exchange rate level cannot be guided without taking long-term rational expectations regarding exchange rates into account.⁵

Concern over interest rates was high because the U.S. Federal Reserve Bank, in particular, implemented a tightening of the money supply, and caused violent fluctuations in short-term interest rates and a fixed high level of long-term interest rates. The Americans were of the opinion that this monetary tightening was a countermeasure against inflation, but the exchange rate suffered a greatly adverse effect. However, a model has yet to appear to show clearly and theoretically why long-term interest rates remain fixed at a high level. As long as that is the case, there will be a theoretical ambiguity in the relationship between interest rates and the exchange rate.

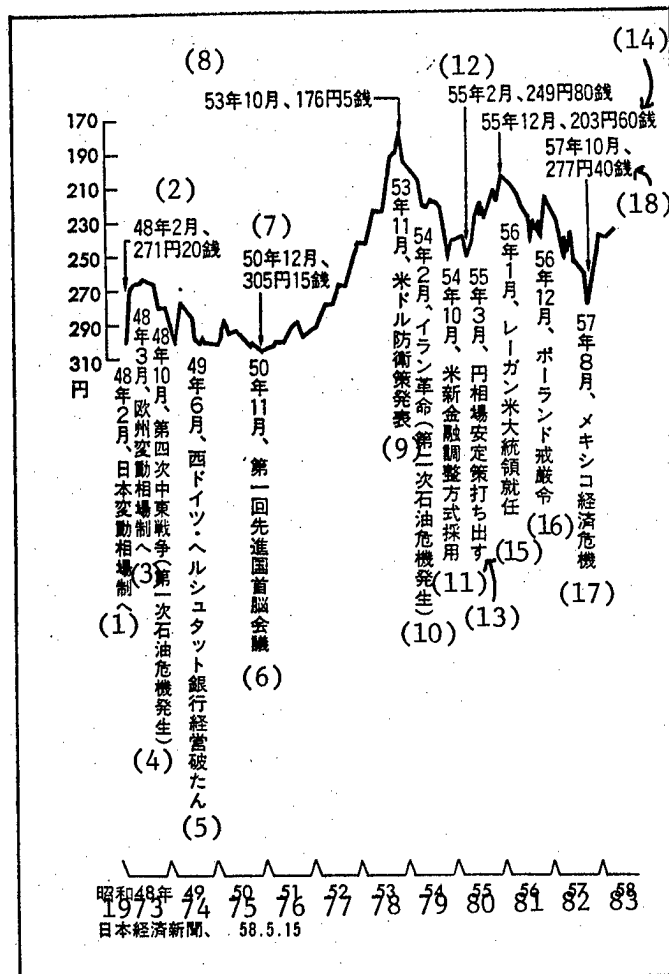


Figure 1. 10-Year Yen Price Activity
(Spot price at the end of each month)

Key:

- (1) February 1973. Japan enters flexible price system
- (2) February 1973. 271.20 yen
- (3) March 1973. Europe enters flexible price system
- (4) October 1973. Fourth mideast war (outbreak of first oil crisis)
- (5) June 1974. West Germany's Herstatt Bank fails
- (6) November 1975. First advanced nations summit
- (7) December 1975. 305.15 yen
- (8) October 1978. 176.05 yen
- (9) November 1978. U.S. dollar defense policy announced
- (10) February 1979. Iranian Revolution (outbreak of second oil crisis)
- (11) October 1979. United States adopts new monetary adjustment method
- (12) February 1980. 249.80 yen
- (13) March 1980. Yen price stabilization policy worked out
- (14) December 1980. 203.60 yen
- (15) January 1981. Reagan inaugurated as U.S. President
- (16) December 1981. Marshal law in Poland
- (17) August 1982. Economic crisis in Mexico
- (18) October 1982. 277.40 yen

2. Yen-Dollar Rate and Exchange Controls

In this section, we will take a cursory look at the movement of the yen-dollar rate after the shift to the float, and we will pursue the transitions (phases) of exchange rate policy, concentrating on exchange controls. Intervention policy and monetary policy will be discussed in the next section. Professors Komiya and Suda have done the most detailed analysis of Japan's exchange rate policy,⁽⁸⁾ and virtually nothing should be added to these two gentlemen's analysis up to the beginning of 1975. (However, I lack the capacity to evaluate their articles in detail.) Exchange rate policy up to the appreciation of the yen in 1978 is not covered in detail, but is discussed. Below, I, in my own way, put forth an account, but the analysis of Japan's exchange rate policy around the time of the oil crisis is based solely on their articles.

The First Oil Crisis

Let us consider dividing exchange rate policy after the shift to the float into the following four phases. First, the phase from March 1973 to February 1975, which was a period of confusion that included worldwide inflation and the first oil crisis. The yen-dollar rate was stable in October 1973 at about 265 yen, but after war broke out in the Middle East, it dropped temporarily to 300 yen. Subsequently, the yen appreciated to little less than 300 yen (called by Professors Komiya and Suda, "the interlude of the strong yen"); then, the first phase ended with a practically stable rate of 300 yen.

When we look at the main exchange control actions taken during this phase,⁶ we find that, following the outbreak of the oil crisis, measures to restrain capital outflow (prohibition of the issuance of yen-denominated foreign bonds and purchasing restrictions on U.S. Treasury Department securities) and measures to promote capital inflow (the easing of yen conversion restrictions, the easing of the flotation of overseas issues by nonfinancial firms, and the easing of the impact loan restrictions) were taken. These were truly a 180 degree turn from the measures taken before the oil crisis, measures which took control of promotion of foreign currency payments and receipts as their objectives. After the summer of 1974, mainly measures to promote capital inflow (such as the easing of the restrictions concerning the purchase of national bonds by nonresidents) were implemented. For the purpose of future reference, I would like to note that these measures had the nature of strengthening or easing quantitative restrictions, and that measures that used the price mechanism, such as reducing the reserve ratio of the free yen accounts of nonresidents, were extremely insignificant.

To what extent were these quantitative exchange controls effective? Generally, speaking, the effects of exchange controls are limited. An example of this occurred during the Nixon shock when, in spite of Japan's capital inflow restrictions, which were so tight it was said that even water could not leak through them, \$4 billion of speculative funds flowed in during a 2-week period. However, we can also raise examples in which exchange controls had a considerable effect. I believe that the spot and forward spread of the exchange rate serves a useful purpose as an indicator. When short-term capital transactions are free, the spot and forward spread can be expected to be in virtual accord

with the difference in interest rates (the interest rate parity theory). It is difficult to obtain data with which to illustrate this, so strict verification cannot be made, but when the spot and forward spread is unusually large, at which time exchange controls exhibit their effects to a certain extent, such an effect can be discerned.

In the first phase, the spot and forward spread was large only in July 1973 (when yen futures were higher) and in the 5 months following the oil crisis (when yen futures were lower). The former shows the effectiveness of short-term inflow restrictions, and the latter shows the effectiveness of outflow restrictions. Although I cannot say whether the promotion of the outflow and the promotion of the inflow were effective, the restrictions were effective. Of course, whether quantitative restrictions are desirable is another matter, and I concur with the critical view of Professors Komiya and Suda.

The Strong Yen of 1977 and 1978

The second phase was from March 1975, when the confusion of the oil crisis generally settled down, to the end of 1978, when the Carter dollar defense policy was launched. Except for a drop in 1975, the yen-dollar rate during this period was almost always on the rise, and, for a time, reached 180 yen. The rise of 120 yen in a period of slightly less than 4 years can truly be considered enormous (if we use the IMF formula, it was a 67 percent rise). However, considering that the second oil crisis at the beginning of 1979 was a shock, it is doubtful whether we can say that an exchange rate of 200 yen to the dollar or thereabouts was unusual. A market price of 180 yen surely meant that the dollar was not trusted and probably included the excesses of the bandwagon effect. However, when we take a general survey of import and export prices both at home and abroad and of the movement in Japan's volume of import and export ⁷ (assuming there was no second oil crisis), the rate of 300 yen during 1976 meant that the yen was a bit cheap. The 1978 rate of 200 yen or thereabouts could be considered possible to maintain over the mid-term. This point requires an evaluation of the intervention, which is made in the next section.

What were the exchange controls in the second phase? From a general perspective, in this second phase there were restrictions on capital inflow and promotion of outflow, and, in this sense, we see another 180 degree turn from the oil crisis of the latter half of the first phase. If we look at some of the measures taken, they were, looking at inflow restrictions, impact loan restrictions in 1975, limitations on the floating of loans overseas by nonfinancial corporations in the same year, raising the reserve ratio of free yen accounts in 1977, and prohibitions on income from Japanese bonds for nonresidents in 1978. In terms of outflow promotion, there were the easing of restrictions on the purchase of foreign securities in 1975, the reopening of foreign currency-denominated lending by Japanese banks in 1975, and the reopening of the flotation of yen-denominated bonds.

However, that is not to say that the exchange controls of the second phase can be painted as inflow restrictions and outflow promotion. For example, the 1975 limitations on the floating of overseas loans were eased the following

year, and limitations on conversion to yen by foreign banks were eased many times. Moreover, during 1975, because the rate of the yen against the dollar decreased by about 15 yen, the measures taken in 1975 cannot be interpreted as actions to keep the yen strong. In 1975, the improving trend of the balance of payments was clear, and it probably was thought that the chaos of the oil crisis was coming to an end. Still, I find the capital inflow restriction measures of 1975 difficult to understand. There is probably nothing one can do but criticize the move to promote exports by maintaining a cheap yen.⁸

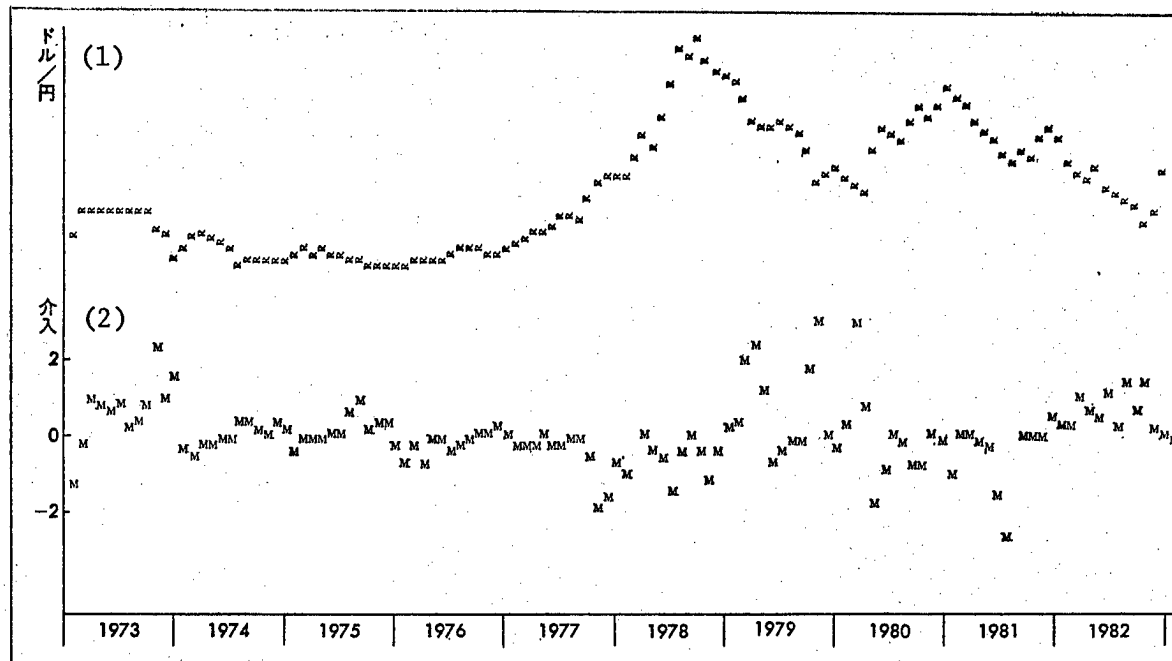


Figure 2. Dollar/Yen Rate and the Foreign Exchange Funds Balance

Key:

(1) Dollar/yen

(2) Intervention

Glancing at the spot and forward spread for this second period, we find that, except for the autumn of 1975, it was virtually in accord with the difference in interest rates, and I do not in the very least believe that exchange controls added a noticeable constraint to the short-term movements of capital. However, in the autumn of 1977 and the spring of 1978, there was a considerably higher futures quote for the yen and it seemed as though exchange controls were effective. However, according to Professors Komiya and Suda (in pages 54 and 55 of reference (8a)), this was nothing more than the interest rate used in arbitrage being lowered in Japan.

After the Dollar Defense Policy

I am not very confident about how long the third phase lasted, but I have chosen from the Carter dollar defense policy in February 1978 to the end of the cheap yen in April 1980. The yen rate dropped about 80 yen, and this occurred along with the outbreak of the second oil crisis. The fourth phase extends a little more than 3 years in the 1980's, and is a period of violent fluctuations of U.S. interest rates and great ups and downs in the yen rate. In this phase, talk of an interest rate quotation is frequently heard, and criticism of the instability of the exchange rates is growing.

Judging from the exchange controls taken during the third phase, we find that they were measures to promote the inflow of capital, such as a lowering of the reserve ratio on free yen for nonresidents, the easing and the abandonment of restrictions on the acquisition of yen-denominated bonds, the expansion of the yen conversion framework, the easing of impact loan restrictions, and the easing of restrictions on the issuance of overseas yen-denominated bonds. On the other hand, five yen-defense measures were taken with the objective of restricting capital outflow. Included in these were: the strengthening of restrictions on the spot positions of exchange banks; the strengthening of guidance on overseas lending by exchange banks; and the strengthening of guidance on the purchase of foreign securities and on foreign currency deposits. All of these aimed at hindering the cheap yen and were a 180 degree turn from the measures of the second phase. What's more, they had the nature of quantitative restrictions and not of price mechanism measures. However, they cannot be considered to have constrained the movements of short-term capital in the least, and the spot and forward spread rate was virtually the same as the difference in interest rates.

Even at the beginning of 1980, there were for a while exchange control measures in defense of the yen. However, by the enactment of the new foreign exchange law at the end of 1980, outflow restrictions were eased bit by bit. This was both because of the aim to further the liberalization of exchange controls and because, since a strong yen had developed around May of that year, the defense of the yen had become unnecessary. As a result, no exchange control measures worth mentioning were taken. The spot and forward spread faithfully reflected the interest parity, and the movements of short-term capital were practically free. From the advent of 1982 the yen-dollar rate experienced a large drop of 70 yen over a 9-month period, and during that time, some measures restricting the outflow of long-term funds were taken. However, based on the new foreign exchange law, Japan could not help but implement very strong measures, and during that year the outflow of long-term capital was on the order of \$10 billion. Based on this, one cannot say that exchange controls are without effect, but one cannot deny that they did not prevent a weak yen. I would like to note that even in this case, the emphasis was on quantitative restrictions and price measures, such as an interest equalization tax, were ignored.

Were we to summarize the above sketch of exchange control policy, it might go as follows. Exchange control policy was always an important instrument of exchange rate policy, and was frequently invoked in accordance with the movement of the exchange rate. Virtually all of the concrete measures were the

strengthening or easing of quantitative restrictions, and, except for alterations in the reserve ratio of free yen deposits, the use of price mechanisms was ignored. The objective of exchange control policy was to counter a change in the exchange rate in one direction, and (except for 1975, which I regard skeptically) was not to foster a change in the exchange rate. When we turn to the effects of the controls we may be able to say that in the first phase the movement of short-term capital was hampered considerably and contributed to the stability of the exchange rate from mid-1973 to the end of 1974. However, from the second phase on, we see that although there were some effects, they were not very great.

3. Intervention Policy in the Foreign Exchange Market

Effects of Intervention

That intervention in the foreign exchange market is viewed as an important instrument of exchange rate policy was touched upon at the outset of this manuscript; this is clear from the day-to-day words and actions of the authorities as well. However, opinion is split seriously as to the effects of intervention. The finance ministers' summit report, which was already cited, presents both arguments in parallel fashion (and with regard to the Japanese yen, the report favors the argument that intervention has an effect). The frequent demands for positive intervention that emerge from Japanese business give proof of the strong faith in its effectiveness. Moreover, there have been occasions on which the exchange rate was stabilized through intervention. As mentioned earlier, a fixed exchange rate was virtually in effect from April to October 1973 and from August 1974 to January 1975, but in those cases, intervention was utilized effectively alongside exchange controls.

However, among economists, opinion on the effects of intervention is not universal. In the previously cited article by Komiya and Suda, doubts are expressed in several spots about the effects of intervention. Their reasoning is that under an exchange rate that is different from people's expectations, a potential imbalance in the supply and demand of foreign exchange is extremely great. In contrast, Mr Fukao (see (7c)), who places heavy emphasis on the role of the risk premium vis-a-vis the spot rate, states that under a given expected rate an intervention of \$10 billion will bring about a 15-yen change in the spot rate. Fukao evaluates the effect of an intervention of this extent to be small. According to Professor Amano, who acknowledges a somewhat larger effect,⁹ an intervention of \$2 billion during the fourth quarter of a year will correspond to a change of 15 yen in the spot rate.

In this sort of situation, I, having but glanced at the existing data, cannot hope to determine the effect of intervention. In what follows, I cite some figures while pursuing intervention through the four phases, but I attach many reservations, in particular to my statements about its effects. The data used is the spot rate and the private balance of payments of foreign exchange funds following the shift to the float. All of the figures are monthly figures. Accurate data on the amount of the interventions has not been made public and I use, as is common, the increase or decrease in foreign currency reserves (adding appropriate adjustments) and the foreign exchange accounts balance.

Judging from the size of the interventions, a deflator is necessary, but I did not hit upon an appropriate one and, in the end, I make my case without a deflator. However, because the figures are complicated, I wanted to express them as a multiple of the standard deviation.

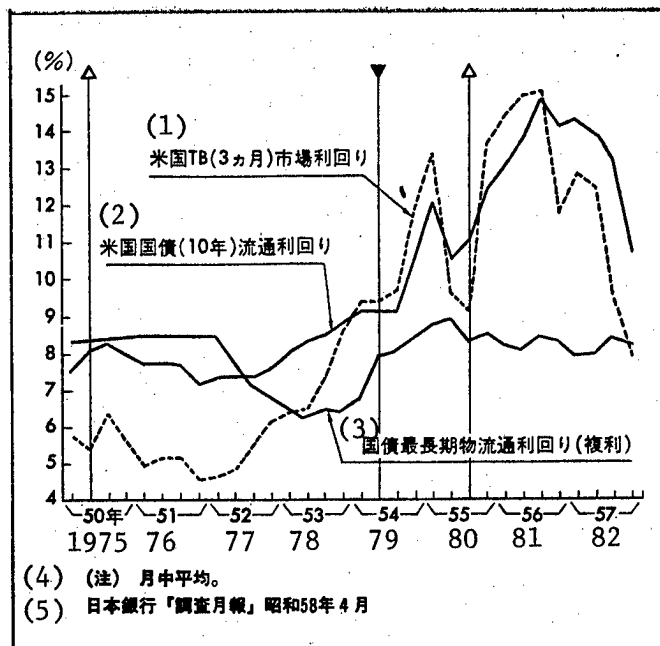


Figure 3. Changes in Long-term Government Bond Yields and Overseas Interest Rates

Key:

- (1) U.S. Treasury Bill (3-Month) Market Yield
- (2) U.S. Government Bond (10-Year) Circulation Yield
- (3) National Bond Maximum Term Price Circulation Yield (Compound Interest)
- (4) Note: Monthly average yield
- (5) Bank of Japan, CHOSA GAKUHO, April 1983

General Intervention Policy

I already touched on the yen-dollar rate in the previous section, but if we might look at some figures: the highest for the 10 years was 302 yen; the lowest, 184 yen; and the average, 259 yen. The average rate of change from the previous month was virtually zero, and the standard deviation was 2.8 percent. This makes for a very large annual rate of 33.6 percent. The average intervention was virtually zero, and judging from the entire period of the float system, one can see that intervention was not partial to either selling or buying. Five times the amount of the intervention exceeded twice the standard deviation when the intervention consisted of buying yen and selling dollars, and three times when the intervention was the opposite. Except for February 1973, the former converges on the cheap yen period from

1979 to 1980 (the third phase, which included the second oil crisis and the Carter dollar defense policy). Intervention by buying dollars occurred twice in the strong yen period from 1977 to 1978. One look at the graph shows that there are no indications of the size of the intervention expanding or declining.

While the rate of change of the exchange rate over the previous month is weak, it follows an autocorrelation (the coefficient of the first period was 0.3, and from the second period on was practically zero), and rejects the random walk hypothesis. However, by the calculations of my colleagues, the random walk hypothesis cannot be rejected for the daily exchange rate. The correlation coefficient between the rate of change of the exchange rate and the intervention is quite high at 0.5, and when its direction is to intervene by selling dollars and buying yen, the exchange rate is working on a cheap yen. As stated at the outset, this does not conflict with the hypothesis of LAW intervention. Except for certain periods, Japan's intervention policy can be considered to be LAW intervention. The results of yen-dollar rate research by a foreign country (this is summarized and cited in pages 67-69 of (3)), generally supports the LAW hypothesis. Japan's authorities also frequently make statements to that effect.

Verifying whether the intervention was sterile is outside the scope of this manuscript, but just from looking at the correlation coefficient, the rate of change between M1 and M2 has close to no correlation with the change of the exchange rate at present and in the past. On the other hand, the present and past value of the net private payment of foreign exchange capital has a very slight but negative correlation with the increase of the money supply. If we look at the money supply record as a result of sterilization, we must ultimately view Japan's interventions as sterile. Although the intervention after the Nixon shock was not sterile and was one of the prime causes of the 1973 inflation, we can say, when comparing it, that our monetary authorities acted wisely. Conversely, there are those who may believe that when the size of the intervention was small, and the intervention was not sterile, exchange rate policy was inadequate.¹⁰

The First Oil Crisis: Before and After

Having gone about my general narrative in this fashion, let me now take up intervention during each phase. As already described, the period up to October 1973 operated just like a fixed rate market, but this was accompanied by a yen-buying intervention of a considerable size. One can be critical, as are the essays by Komiya and Suda, about intervention for the purpose of maintaining the exchange rate level under the float. At the very least, it could not be considered to be LAW intervention, and it cannot be rationalized from the subsequent position of Japanese authorities. Looking back on the first oil crisis, the enormous loss of foreign currency can only be evaluated as deplorable.

An analysis of the monthly data of the intervention policy of the 1 or 2 months following the first oil crisis is unwarranted; the reader can use the essays by Komiya and Suda as references. After March 1973, the size of the intervention was small (generally about one-third of the standard deviation),

the direction was reversed, and no noticeable intervention policy was implemented. If we can be critical of the intervention policy of this period, let us work toward the point that LAW intervention was not adequately carried out. However, I cannot say that I am confident enough to criticize the laissez-faire "strong yen interlude" of April 1974 under the circumstances of that time.¹¹

In the previous section I referred to the slack, weak yen of 1975 during the second phase. Other than the purchase of a somewhat large amount of yen in August and September of that year (which in sum was 1.8 times the standard deviation), intervention was virtually nil. Except for these 2 months, LAW intervention was also very slight. Judging from the international balance of payments, the balance of trade showed a large surplus, and there was an apparent improvement in the current accounts balance. Intervention in the third quarter was virtually zero. If we are to be critical of the laissez-faire "strong yen interlude" of April 1974, when I think we cannot escape from criticizing the laissez-faire weak yen of 1975. Of course, let us not give much merit to the loss of foreign currency reserves.

The Strong Yen of 1977 and 1978

The period from 1976 to October 1978 was a strong yen period, especially during the latter 2 years, and intervention consisted of the LAW dollar-buying variety (yen were bought only in December of 1976). The extent of the intervention up to October of 1977 was small. However, intervention increased substantially in that month, and the intervention in that month and in March 1978 exceeded twice the standard deviation (the latter was 4.8 times). Valued in dollars, the intervention was said to be \$12.5 billion in the latter half of that year, and the increase in foreign currency reserves from the beginning of 1976 to October 1978 reached \$16 billion (including interest income). This was quite a large intervention, but even it could not prevent the increase in the yen-dollar rate to around 180 yen. I do not believe there is any dissension from the view that 180 yen overshot the mark, but if that is the case, how should we assess the intervention during this phase?

The most explicit statement is the argument that intervention had no effect, that "to stop and start the progress of the strong yen by means of large-scale interventions was nothing more than to temporarily slow down the pace from several days to several weeks." From the viewpoint that intervention has an effect, one can say that without intervention the yen would have climbed even higher. However, we must not overlook the simple application of the figures provided by Fukao and Amano, which were cited earlier. That is because (in the Fukao model) the expected rate should change, and (in the Amano model) mutual operation of the exchange rate and other variables occurs. If I may dare to venture an opinion, I am in favor of the view that intervention had no effect. As mentioned in the previous section, the rate of a little over 200 yen is viewed as a balanced rate that was in accord with the current accounts balance. To prevent it from taking place by intervention was difficult. I would like to consider, as the bandwagon effect, the time during which the rate went beyond this figure and proceeded to 180 yen. That rise might have been hampered by a further large-scale intervention. However, I do not believe

that the bandwagon effect could have gone beyond 30 yen, and I find it difficult to believe that the yen could have gone much beyond 180 yen, even without intervention.

Admittedly, the effect of the interventions of the second phase can be sought in the increase of foreign currency reserves. I do not believe that this profit was slight. In the short term there was a capital loss, but because foreign reserves are maintained in dollars, the loss in value accompanying the change in the exchange rate, as indicated in yen, was of course only a paper loss. The real capital loss of foreign currency reserves is determined by the equilibrium of interest rates and the inflation in the price of imported goods, as stated in dollars. This, from a long-range view, was not all that great.

The Third and Fourth Phases

In the third phase, because of the second oil crisis that followed right upon the dollar defense policy, the yen dropped 80 yen in a year and a half (and, by using the GNP deflator, the drop in the real rate was even greater). Part of the drop was a correction of the bandwagon effect of the second period, and part of the drop was an "overshot" in the direction of a weak yen. However, the drop in the real yen rate after the oil crisis was unavoidable⁽¹⁰⁾; at that time, prices were stable, and it was unnecessary to worry about the import inflation effect of a cheap yen. Of course, it was not that there were no advocates of monetarily accommodating the rise in the price of oil. At any rate, I believe that there was no cause to counter a reversion from a rate of 180 yen (in fact, a yen-selling intervention was carried out at the end of 1978), and that there was no reason to counter the drop in the yen rate after the rise in the price of oil.

However, intervention in this phase was large. The direction was LAW, and when the rise in the yen continued into the summer, yen-selling intervention was carried out. However, while the yen-selling intervention was small, the dollar-selling intervention was huge. The interventions that exceeded twice the standard deviation were four times the standard deviation (this is a monthly average value). Judging from the decline in foreign currency reserves, the intervention reached \$8.8 billion (which was reached by subtracting the SDR allotment, but not adjusting interest income). Just as with the second phase, I have difficulty determining whether this large-scale intervention was effective. As I have already stated, I would like to interpret the yen-dollar rate of around 250-yen as a bit excessive, judging from the surge in the volume of exports from that time on, and, in that sense, I believe that the intervention was generally ineffective. The intervention of the third phase was LAW, and should not be criticized as far as direction is concerned. However, in spite of its large size, this intervention could not prevent the bandwagon effect, and did nothing more than reduce foreign currency reserves.¹²

To be fair, one should at this time introduce the self-evaluation of Japan's monetary authorities into the narrative on intervention policy. According to the finance ministers' summit report, from the latter half of 1977 to the latter half of 1978 "there were numerous instances during the great rise in the

yen when intervention held down the bandwagon effect and reduced the short-term instability of the exchange rate." Moreover, the report asserts that from 1979 to the beginning of 1980 and from January 1981, "intervention in the period of the cheap yen eased the drop in the yen." As for cooperative intervention, November 1978 and March 1980 were times in which U.S. authorities "showed by their statements and positive intervention that their own views on the exchange rate were in accord with Japan's views," and the effectiveness of intervention was said to be "dramatically increased."

Some of the aforementioned views of the authorities refer to the fourth phase, but the intervention in the fourth phase was generally small-scale. Other than the yen-selling, dollar-buying interventions of June and July 1981, each of which were about twice the standard deviation, the only intervention worth noting was the consistent yen-buying intervention when the yen was weak in 1982. The interventions of June and July 1981 were unusual because during this time the yen was becoming weaker. Judging from the assertions of the authorities in the previous paragraph, that ought to have been a yen-buying intervention. Foreign currency reserves also increased, but perhaps the monthly average data is inadequate.¹³ The yen-buying intervention of 1982 was a LAW intervention. The decline in foreign currency reserves during the year was \$5 billion. When we compare this also to the 70-yen decline in the yen rate, the intervention does not appear to be all that large. The view is widening that the exchange rate for 1981 and 1982 should be called an interest rate quotation, and is effected by U.S. interest rates. Most observers may be reconciled to the fact that this cannot be resolved by intervention.

In summation, except for the time of the first oil crisis, we cannot judge whether intervention had the effect of stabilizing the exchange rate. The least we can say is that the great changes in the exchange rate after 1978 occurred in spite of interventions of considerable size. We have no reason to strongly criticize LAW intervention policy, but we also have no reason to give it a positive evaluation.

4. Monetary Policy as Exchange Rate Policy

We will look at monetary policy as exchange rate policy first by considering the extent to which monetary policy is used in the management of the yen-dollar rate and its effects, and second by keeping in mind the situation over the latest 2 or more years and taking up the question of the extent to which considerations in terms of exchange rate policy hindered the pursuit of domestic targets.

Monetary Policy and External Targets

Japanese monetary policy is said to be very conscious of external targets. During the high growth era of the 1950's and 1960's, recovery in Japan's international balance of payments was an important target right alongside domestic recovery. After the Nixon shock, the prevention of a revaluation of the yen was said to be one of the aims of monetary policy. Although there are no noteworthy episodes after the shift to the float, the results of research show that the operations of monetary policy take external targets into consideration.

For example, the research of Prof S. Black⁽¹¹⁾ expresses Japan's monetary policy by the discount rate, the deposit reserve ratio and the window restrictions, and presumes that that policy can be explained by whatever domestic and external economic factors exist in any period, including the pegged price and the float. Economic variables such as the unemployment rate and the deflation gap are significant, but prices are not necessarily so. International balance of payments related variables, such as foreign currency reserves, the real balance of trade and comparisons with the cost of labor overseas are all significant. Although the exchange rate itself is not considered (even in the pegged price era), he seems to be saying that monetary policy has taken international variables into account since the shift to the float.

On the other hand, if we look at the correlation of the money supply and the call rate with the exchange rate, this, as has been mentioned before, is practically zero. In other words, for both M1 and M2 (plus CD's) in the money supply, the correlation coefficient with the rate of change in the exchange rate was minus, and near zero, up until the last 3 months. Indications are that although money supply does not conflict with the existence of exchange rate policy (a strong yen has occurred in the past along with an increase in the money supply), the coefficient is entirely insignificant. The correlation coefficient with the call rate level is plus, and near zero, and the interpretation of the money supply holds entirely true for the call rate as well. The call rate is expected to best reflect a short-term monetary stance, and the above correlation coefficient suggests that short-term monetary policy has not been used by Japan as exchange rate policy.

If I might have a word on each of the four phases, monetary policy at the time of the first oil shock was highly restrictive, but this was an anti-inflation measure rather than exchange rate policy. During the strong yen era of the second phase, there are no indications that monetary policy took the exchange rate into special account, and we can interpret the low interest rate of 1978 (in which the call rate was the lowest on record for the 10 years and the discount rate was 3.5 percent) as exchange rate policy. (See (3) p 52) In response to the second oil crisis of the third phase, Japan turned to a tight monetary policy. That the policy did not rush to accommodation of the oil crisis can be highly appreciated, but monetarists were able to criticize its stringency (in particular, the rapid decrease in the rate of increase of M1).⁽¹²⁾ In any case, this was a preventive tight money policy against inflation, and while it had its aversion to a weakening yen, it was a domestic policy rather than an exchange rate policy. If there was a measure that could be called exchange rate policy, it might be the raising of the discount rate in November 1979 (along with the leap in the call rate), for this measure could be interpreted as a reaction to the upward surge in U.S. interest rates rather than to the domestic situation.

As for the period subsequent to monetary tightening by the United States (which period is virtually all of the fourth phase), we will discuss the linkage problem of Japanese and U.S. interest rates, and the assertion that high interest rates in the United States constrict Japan's monetary policy. We do this because it is virtually self-evident that Japan's monetary policy is very conscious of the yen-dollar rate.

Are Japanese and U.S. Interest Rates Linked?

If Japan's monetary policy became constrictive in order to avoid a decline in the yen-dollar rate, I feel it is appropriate to recognize the truth in that assertion (that high U.S. interest rates are the prime cause of the weak yen), but (go back to the first section) this is difficult to favor as policy. The autonomy of monetary policy brought about by the float is expressed in the changes in the exchange rate. Moreover, this is because the adverse effects of a weak yen on the Japanese economy cannot be considered to be too great. However, to assert that the constraints emerged because Japanese and U.S. interest rates are linked requires a bit more attention and closer study.

First of all, there is truth to the linkage of interest rates, but as pointed out in last year's "Economic White Paper," since the end of 1979, there can be no mistaking that the interest rates of other countries have narrowed their spreads with the interest rates in the United States. However, the detailed movements of short-term interest rates are quite different, especially between the United States and Japan, and any appearance of linkage can only be applied in a very weak sense.¹⁴ I object to taking the movement of private funds as the route by which short-term rates are linked via the exchange rate, and I made this point in the first section. However, because a country's short-term rates and long-term rates are ordinarily linked, I do not mean to object to an econometric analysis that uses the former.

As for long-term interest rates, the image of a narrowing spread appears as well. Although long-term interest rates declined during the monetary easing of 1977 and 1978, they did not decline during the easing of 1981 and 1982. This can be regarded as a narrowing of the spread with the leap in long-term U.S. interest rates. With regard to long-term interest rates, I feel that the exchange rate is closely related to the difference in real Japanese and U.S. interest rates, because of private actions. (Refer to the first section.) However, the mechanism by which the long-term rates of both countries are linked is not all that clear.

The reason that the difference in interest rates changes the exchange rate is not because of movements of large quantities of funds. The flow of capital, in a broad sense, is the flip side of the current accounts balance, and since the current accounts balance does not react immediately even though a difference in interest rates occurs, a movement of funds cannot take place. Rather, incipient movement of capital winds up not taking place because the exchange rate changes.¹⁴ The view is not correct that a rise in interest rates accompanies high U.S. interest rates, a large outflow of funds to the United States, a drop in the yen rate, and a shortage of funds within Japan. In fact, when we study Japanese data, there is no evidence that in seeking the interest rate differential a large amount of capital flowed out of Japan.⁽¹⁴⁾

The Autonomy of Monetary Policy

Even though I have stated above that interest rates are linked in Japan and the United States (especially long-term rates), there is the persuasion which doubts whether the linkage is brought about by private actions. I have already

cited an explanation of the medium of private actions,⁽¹⁵⁾ but problems remain, such as the relationship of long-term rates within a country. If the linkage through private actions is weak, then what linkage that is seen is brought about by policy-making authorities. When U.S. interest rates rise, the authorities may implement tight money policies (out of concern for a drop in the yen), and consequently, people will buy long-term securities expecting such action by the authorities.⁽¹⁴⁾ ⁽¹⁶⁾

The steadiness of Japan's long-term interest rates in 1981 and 1982 was a product of several factors. A small part of that was that U.S. interest rates are linked through private actions (and long-term funds and short-term funds move in opposite directions). The authorities were averse to a drop in the yen rate and haphazardly carried out an easing of monetary policy. Moreover, the large fiscal deficit produced a sentiment for an excess of national bonds, and the money center banks began to feel pressure to sell national bonds. According to the analysis of the Bank of Japan,⁽¹⁶⁾ the effect of high U.S. interest rates was great in 1981, and the pressure to sell national bonds was great in 1982.

The harm done under the float to the autonomy of monetary policy is just a part of what originates purely through the actions of the private sector because of the linkage of Japanese interest rates to U.S. interest rates. When we judge this on the basis of the points stated above, we see that this part is not very great. However, to do a further detailed study of autonomy would require me to analyze closely the relationship of the Japanese and U.S. economies. At the present time, there appear to be many difficult points in analyzing that relationship.⁽¹⁷⁾

Concluding Remarks

To the assertion that when there are high interest rates in the United States, the autonomy of monetary policy will be harmed, I have indicated a rebuttal asking for the evidence. However, there is the position of paying close attention to the adverse effect of the drop of the yen-dollar rate itself. When one considers that the effectiveness of intervention and quantitative exchange controls is extremely limited, then one may feel that there is no way out but to maintain high domestic interest rates. However, if the basic cause of the drop in the yen is the difference between long-term interest rates in Japan and the United States, then it can be expected that a weak yen could be prevented by simply levying a small interest equalization tax on the movement of funds. The assessment of an interest equalization tax may be structurally difficult, but there are no indications it has been considered in Japan. Should not an equalization tax, which uses the price mechanism, merit some consideration, rather than always making 180 degree turns by using quantitative exchange controls.

FOOTNOTES

1. There is little chance of finding a standard definition of exchange rate policy. I have come across many texts, both domestic and foreign, which discuss international monetary affairs, but examples of independent

chapters on this subject are rare. Of course, there is the phrase, "exchange rate policy," but its meanings are diverse. Relatively straightforward treatments of the term can be found in entry (1) in the bibliography (which I have just cited in the text), entry (2) by S. Black, and entry (3) by V. Argy. The last-named includes a detailed bibliography of all the related literature up to the present.

2. Frankly speaking, I am not well versed in cooperative intervention theory. In particular, I find it somewhat difficult to understand why on the one hand some advocate that this intervention must be carried out secretly while on the other hand some explain that cooperative intervention shows the resolve of the authorities.
3. The results of the econometric analysis have not been announced. I hope by all means that they are announced, since the analysis uses the exact quantitative amounts of the interventions. Incidentally, incomplete fungibility of two securities is a necessary condition for intervention to be effective, but not a sufficient condition. If the expected future exchange rate or interest rate changes because of intervention, it is possible that the present exchange rate will not change (i.e., that intervention will have no effect).
4. The aforementioned finance ministers' summit report is divided into short-term, midterm, long-term and miscellaneous sections, and lists a total of 14 objectives of intervention. LAW intervention is classified as a midterm objective. Exchange rate objectives are classified as both midterm and long term. Short-term objectives include intervention that is targeted to preserve psychological rate barriers, for example.
5. See Komiya and Suda (entry (8a)) on the point that short-term interest rates are not important as a decisive factor in the exchange rate. See Fukao (entry (7a) and (7b)) about the relationship between long-term real interest rates and the level of exchange rates.
6. With regard to what I will mention about the shifts in exchange controls, other than the articles by Komiya and Suda, I consulted a May 1982 unpublished article by Akiyoshi Horiuchi, "Monetary Policy in Postwar Japan: Monetary Control by the Bank of Japan," but being an unfinished manuscript, it is not listed in my bibliography. Other than that, I have many times consulted such standard material as "The Annual Report of the International Finance Bureau of the Ministry of Finance."
7. If we are to compare export and import volumes, taking 1976 as a base year of 100, we find an increase in exports to 140 in 1987. If we convert the price of goods exported to the United States into dollars and compare the price with U.S. prices, by mid-1978 there is a rise of no more than 20 percent over 1975. When we go so far as to consider the differences in quality, we can assume that Japan's competitive strength was maintained.
8. However, the intervention of this period was small-scale, and was in the direction of preventing a weak yen. When we look at the economic argument

of that time, as presented in "The Path of Fiscal and Monetary Policy since 1955," which was edited by the Research and Planning Division of the Ministry of Finance, the central theme is the propriety of tight monetary policies. Perhaps capital inflow restrictions should be regarded as strengthening tight monetary policies.

9. The measurements done by Fukao are according to the stock model and do not rely on a period, but we should take note that the statements by Komiya and Suda and the measurements by Amano do take into account a specific period. Moreover, since I do not fully understand Amano's model, I am perhaps mistaken in calling the above figures an effect of intervention in the ordinary sense.
10. When we glance and compare the quarterly base money figures in the foreign exchange account versus the private balance of payments, it is unlikely that we will find any sort of relationship between the two.
11. The assertions of Komiya and Suda (other than their fundamental criticism of exchange controls) are that the international balance of payments deficit should be reflected in the exchange rate, and that foreign currency reserves should be increased by dollar-buying intervention. However, if we were to make a straight line out of the yen-dollar rate between March 1973 and the end of 1975, the 278 yen of April 1974 would virtually be at the top of this trend.
12. There are probably many who oppose evaluating an increase in foreign currency reserves positively and critically evaluating a reduction in these reserves. I believe the foreign currency reserves of Japan are too small. The foreign currency reserves of the major countries at the end of last year were: the United States, \$34 billion; West Germany, \$50.5 billion; France, \$53.4 billion; Great Britain, \$19.7 billion; Italy, \$37.8 billion; and Japan, \$23.3 billion. (Gold is the measure of value in each country.) Japan's gold reserve is small, and even if its value is converted to a par with Western Europe, it is only increased to about \$10 billion.
13. Mr Fukao, who took the pains to comment on this essay, has pointed out to me that the figures for June and July 1981 (as well as for December of that year) are inadequate as intervention data, since they include factors unrelated to the intervention, such as the redemption of Ministry of Finance securities. Since the intervention would be a small-scale yen-buying intervention if the redeemed portion were excluded, doubts about this statement will melt. (I write this while proofreading.)
14. We must make reservations about real-term interest rates. The equalization between Japan and the United States of real interest rates making use of wholesale prices can be rejected, but that which employs consumer prices cannot be rejected. In the cases of the other major countries, no matter which type of price is used, equalization is rejected.⁽¹³⁾ If real interest rates are equalized, the autonomy of short-term monetary policy is lost. Of course, we do not know whether the loss is caused by private actions or by the authorities' exchange rate policy.

15. This is the standard view of the exchange rate under the float, but according to Komiya and Suda, people's understanding is not quite adequate. Incidentally, within one country, the fungibility of short-term and long-term securities is limited, and internationally, when long-term securities are fungible by means of the exchange rate, short-term funds and long-term funds move in opposite directions, and the international linkage of long-term interest rates arises.⁽¹⁵⁾

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